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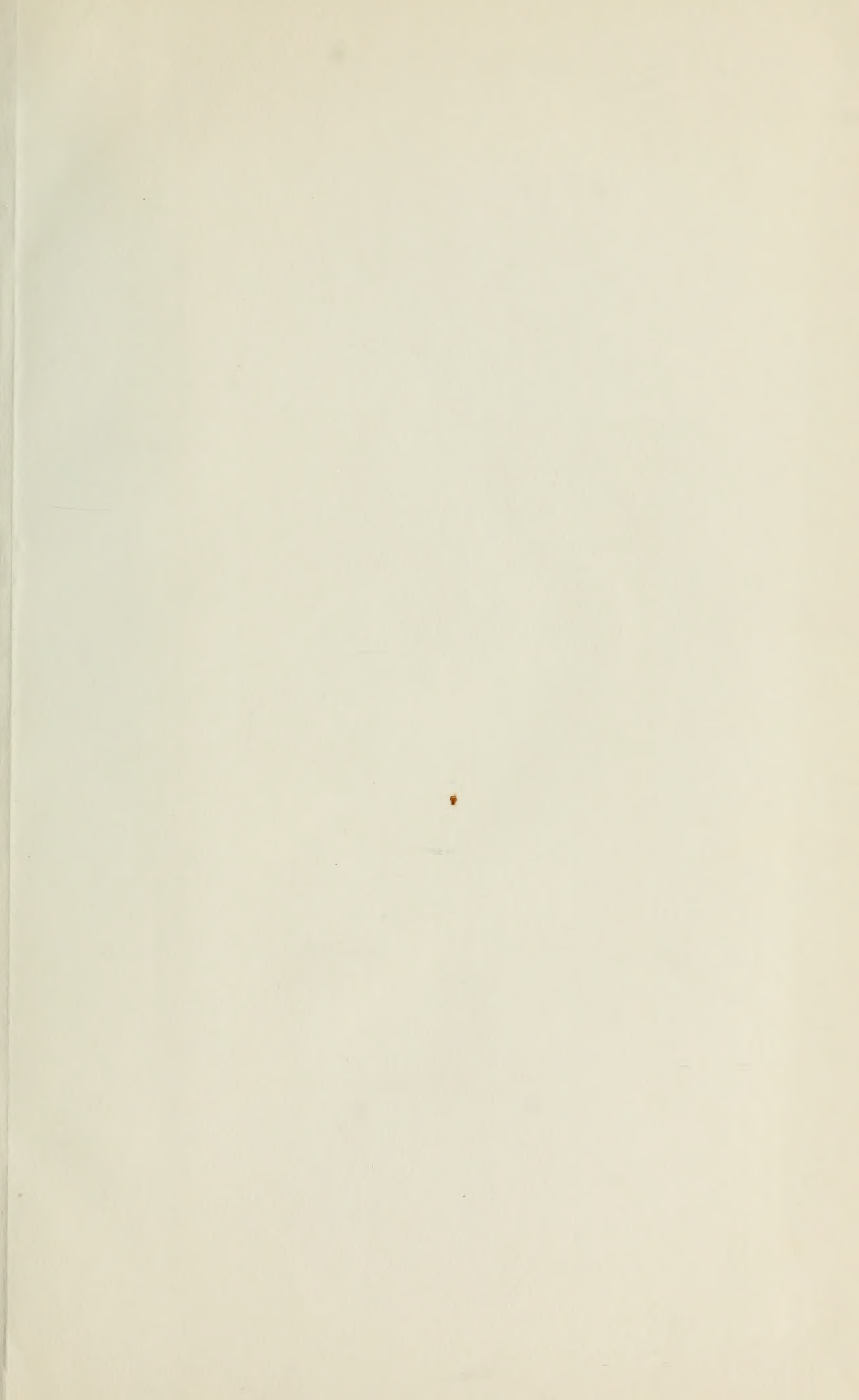
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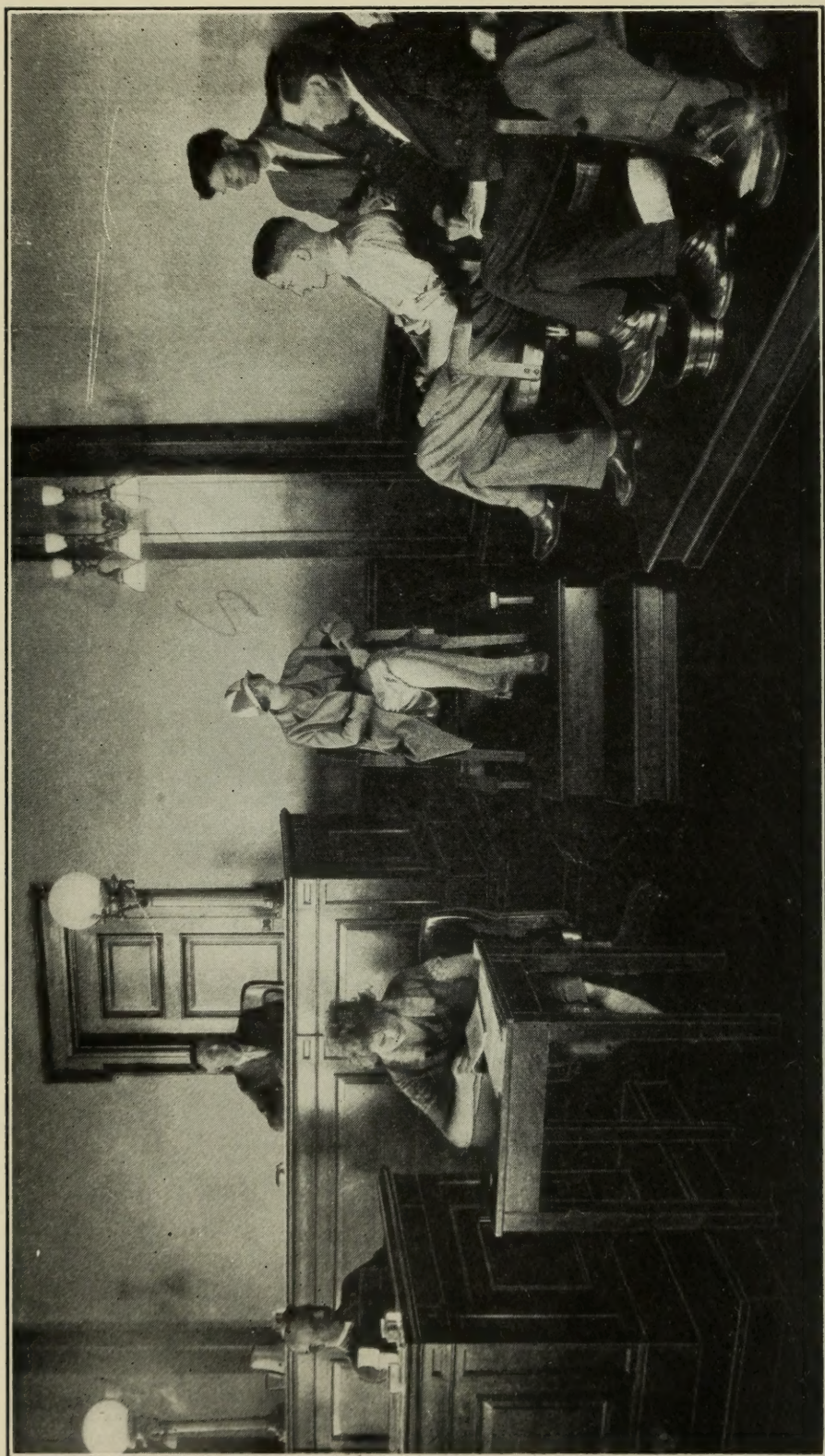


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The appeal of beauty attracts the attention of the jury and may be a force in determining the verdict.

LEGAL PSYCHOLOGY

PSYCHOLOGY APPLIED TO THE TRIAL OF CASES
TO CRIME AND ITS TREATMENT AND TO
MENTAL STATES AND PROCESSES

BY

M RALPH BROWN

INDIANAPOLIS
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PUBLISHERS

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TO THE MEMORY OF MY GRANDFATHER
AND FORMER LAW PARTNER

HONORABLE SETH W BROWN

WHOSE INSPIRATION HAS BEEN CONSTANTLY
BEFORE ME THIS VOLUME IS DEDICATED

PREFACE

The aim of the author has been to collect and to explain within the covers of this small volume those principles of applied psychology which are of distinct benefit to the legal profession. Usefulness to the practicing lawyer has been the criterion upon which the inclusion or exclusion of material has been based.

The field of applied legal psychology is at the present time almost an uncharted one. It is true that there are some few books, and a number of articles or chapters of books, upon this subject, yet on the whole they are so general in treatment, so difficult to obtain, or developed from some other angle than that of serving the lawyer in his work, that it was felt that a volume which would avoid these defects, and which would bring the subject down to date, would not be simply another volume on an old subject, but would be a really creative achievement.

No apologies are offered for the selection of material, for the arrangement, or for the manner in which the subject has been developed. Just criticisms can be made. It would be futile indeed to expect that such would not be the case. There is always plenty of room for differences of opinion when dealing with such inexact sciences as psychology and law. Neither science is standing still. Both are developing daily. What is believed to be correct today may be proved to be false tomorrow. The most that can be hoped for is that if mistakes have been made that they will be discovered, and that thereby the truth will stand out all the more prominently.

A genuine indebtedness is felt by the author to many professional psychologists known to him only through their

works, yet to whom he would be ungrateful were he not here to express his indebtedness for the mental stimuli he has received.

Specific indebtedness is due to D. Appleton and Company for permission to use quotations from *Psychology of Suggestion* by Sidis, and from *Applied Psychology* by Hollingworth and Poffenberger; to Clark Boardman Company, Ltd., for permission to use a quotation from *On the Witness Stand* by Munsterberg; to the *Journal of the American Institute of Criminal Law and Criminology* for permission to use several quotations from an article by Victor V. Anderson; to Doubleday, Page and Company for permission to use quotations from an article by French Strother in the *World's Work Magazine*, and from an article by William Burnham in the *Educational Review Magazine*; to the *Forum Magazine* for permission to use several quotations from an article by Walter Pitkin; to D. C. Heath and Company for permission to use a quotation from *How We Think* by Dewey; to Henry Holt and Company for permission to use quotations from *An Introduction to Psychology* by Angell, and from *Psychology, Briefer Course* by James; to John A. Larsen for permission to use his address on the *Berkeley Lie Detector*; to J. B. Lippincott Company for permission to use quotations from *How to Use Your Mind* and from *Manual for the Study of the Psychology of Advertising and Selling* by Kitson; to Little, Brown and Company for permission to use quotations from the *Conduct of Law Suits* by Reed, and from *Criminal Psychology* by Gross; to Longmans, Green and Company for permission to use a quotation from *Chapters From Modern Psychology* by Angell; to the Macmillan Company for permission to use quotations from *Applied Psychology* by Ewer, from *Educational Psychology* by Starch, from *A Beginner's Psychology* by Titchener, from *Introduction to Psychology* by Griffith, from *Elementary Psychology*, and from *Psychology for Students of Education* by Gates, from *Education as the*

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A personal indebtedness is felt to Dr. Benjamin F. Haught, Professor of Psychology at the University of New Mexico, who has read portions of the manuscript, and who has given many valuable and constructive criticisms.

I am also indebted to my wife, who has helped me with the labor of preparing and checking the manuscript.

M. RALPH BROWN.

November 15, 1926.

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Legal Psychology

INTRODUCTION

PSYCHOLOGY AND LAW

1. Psychology.

A very remarkable and rapid development of psychology has taken place within the past thirty years. Its scope and influence have been extended into nearly every walk of life, so that today it is one of the most popular of sciences. Law, medicine, business, sociology, education and religion are some of the many fields which have been subjected to the scrutiny of psychological inquiry.¹ The newspapers and magazines flamboyantly advertise all sorts of courses and books upon mental development and kindred subjects. Psychological nomenclature has been accepted as the ordinary terms of household conversation.

The members of the bar have witnessed this coming of psychology within the domain of the law with hesitancy

¹ Hollingworth & Poffenberger, *Applied Psychology*, pp. 194-330; Walter S. Hunter, *General Psychology*, Revised Ed., pp. 64-70; Coleman R. Griffith, *General Introduction to Psychology*, pp. 381-475; Alfred F. Schofield, *The Force of Mind or the Mental Factor in Medicine*, 6th Ed.; Bernard C. Ewer, *Applied Psychology*, pp. 135-466; Psychology in Business, *Annals of American Academy of Political and Social Science*, Nov. 1923; G. F. Arnold, *Psychology Applied to Legal Evidence*, 2nd Ed.; Hans Gross, *Criminal Psychology*; Arthur I. Gates, *Psychology for Students of Education*; E. J. Swift, *Psychology and the Day's Work*; Brewster and Palmer, *Introduction to Advertising*, pp. 76-103;

and with apprehension not unmixed with genuine alarm. The law is an old science developed gradually through centuries of existence and experience. Its principles and rules are those which time has an opportunity to test and to prove or disprove. Psychology, on the other hand, is an old study, but a new science. Consequently it is now suffering from growing-pains. Many assumptions are made, many hypotheses are propounded, only to be determined unsound by later experimentation.

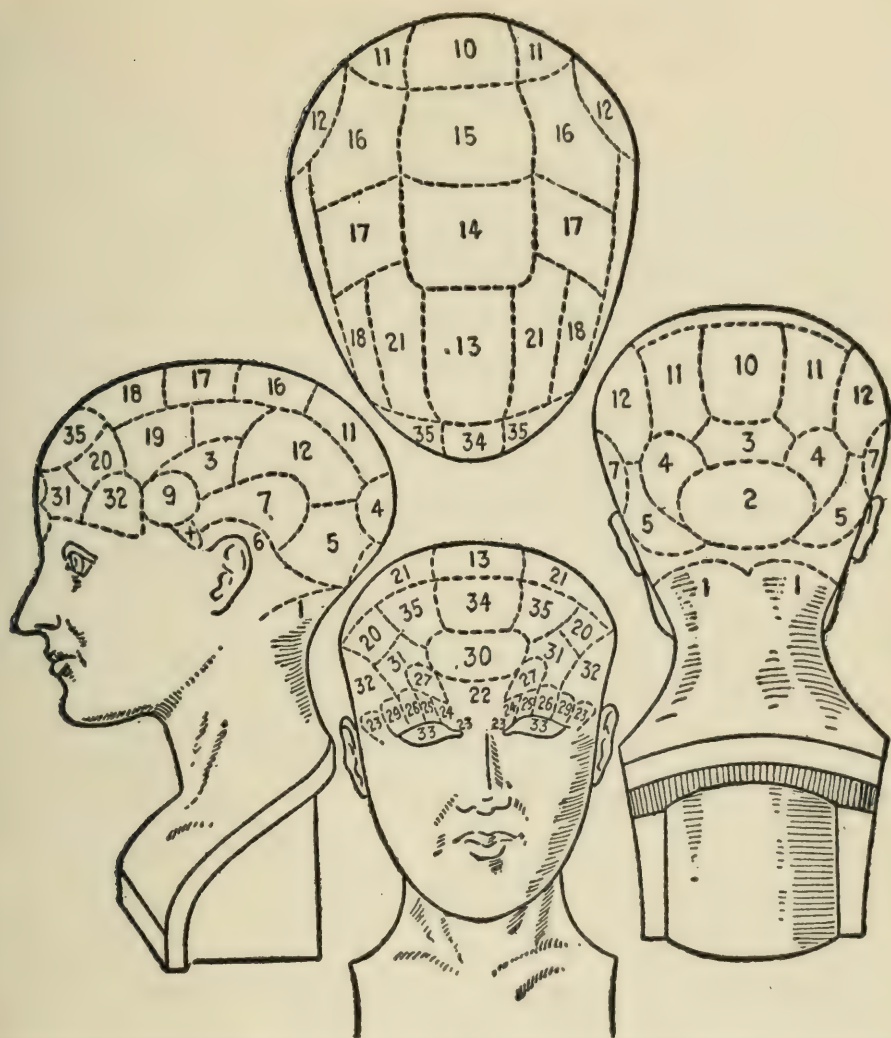
The doctrine of phrenology has been abandoned for this very reason. Those who held to this doctrine believed that a connection existed between the various faculties of the mind and particular organs of the brain, and they believed that these mental faculties and traits of character could be located on the surface of the head. No longer is this theory of special faculties tenable in the light of present day knowledge of the workings of the human mind. Consequently it is discarded.²

Because of its newness, and because of its known failures in particular instances, lawyers have not readily accepted the teachings of this new science of psychology, or systematized human nature.³ | This is explicable in that the legal training and everyday experience of a lawyer teaches him to be conservative, and not to accept a new theory until after he shall have tested it, weighed it and found it to be proved. This is a wholly commendable attitude. It

Walter Dill Scott, *Psychology of Advertising*; Daniel Starch, *Principles of Advertising*, pp. 235-238; Tipper, Hollingworth, Hotchkiss & Parsons, *Advertising*.

² Joseph Jastro, *Fact and Fable in Psychology*, pp. 21-24.

³ See Viewpoint of G. F. Arnold, *Psychology Applied to Legal Evidence*, 2nd Ed., pp. 1-24.



AFFECTIVE		INTELLECTUAL	
I. Propensities	II. Sentiments	I. Perceptive	II. Reflective
1. Amativeness	10. Self Esteem	22. Individuality	34. Comparison
2. Philoprogenitiveness	11. Love of Approbation	23. Form	35. Casualty
3. Concentrativeness	12. Cautiousness	24. Size	
4. Adhesiveness	13. Benevolence	25. Weight	
5. Combaticiveness	14. Veneration	26. Coloring	
6. Destructiveness	15. Firmness	27. Locality	
7. Secretiveness	16. Conscientiousness	28. Number	
8. Acquisitiveness	17. Hope	29. Order	
9. Constructiveness	18. Wonder	30. Eventuality	
	19. Ideality unascertained	31. Time	
	20. Wit or mirthfulness	32. Time	
	21. Imitation	33. Language	

A phrenological chart. The doctrine of phrenology has been discarded by present-day psychologists as unsound. (From Foibles and Fallacies of Science by Hering. D. Van Nostrand Company, publishers.)

avoids many mistakes and embarrassments. At best the law is so inexact a science as to render inadvisable the addition of any unproved psychological theories which would only make for still greater uncertainty.

The policy of conservatism may, however, be carried beyond logical limits. Where the principles of psychology have demonstrated that they do offer real assistance, either partially or wholly, in the solution of some problem of abstract law or the practice of law, it is then wise that the assistance be accepted.

At the present time there are many principles of applied psychology which may be so accepted. These principles are partially the result of gradual development and partially the result of a radical change which has taken place in psychology itself.

Psychology, as a branch of the more abstract science of philosophy, has been a subject of discourse for centuries. The Greek philosophers reveled in the exposition of philosophical psychology. The word "psychology" itself is derived from the Greek. In those days it was the science of the soul.⁴ Their science built around the word "soul" was a vague and hypothetical one according to our present standards. It offered no substantial basis for practical purposes. Its sole accomplishment was to furnish a subject for thought and for tongue-rolling.

From that time until this the definitions and subject-matter of psychology have changed. In 1890 William James, the father of modern psychology, published his two-volume "Principles of Psychology." The definition which

⁴ Hollingworth & Poffenberger,
Applied Psychology, pp. 1, 2.

he accepted stated that psychology was the description and explanation of states of consciousness.⁵ An attempt was made to analyze and to catalogue the mental states which one might observe in his own mind. It was an introspective account of mental action. This type of study while quite valuable and valid today, did not entirely satisfy later psychologists. Something more workable, more uniform and more practical was desired.⁶

A new definition of psychology has been the result. This new definition describes psychology as the science of behavior or conduct. It is an objective study, derived largely from observation of reactions which are made to definite stimuli. It determines the mental processes and condition of a person by a scrutiny of the symptoms thereof as witnessed in physical behavior or conduct.⁷

We shall make use of the principles of introspective and objective psychology, as both have valuable applications to the work of the lawyer.

As applied psychology stands today it is constructive, optimistic and inspirational in tone. It is usually associated, at least in a popular sense, with such terms as success, efficiency, vision, will power and initiative. This is because it has been developed for a utilitarian purpose. Its aim is to serve. Unless it serves to make human energy more efficient, it is not applied psychology. Where strength is found, the aim is to make the greatest use thereof; where

⁵ William James, *Psychology*, Briefer Course, p. 1.

⁶ *Psychology in Business*, *Annals of American Academy of Political and Social Science*, Nov. 1923, p. 2.

⁷ John B. Watson, *Psychology from the Standpoint of a Behaviorist*; Hollingworth & Poffenberger, *Applied Psychology*, pp. 3-6.

weakness is discovered, the aim is either to overcome it, or to make it of as little a disadvantage as possible. This is the way of applied psychology. It seeks to encourage, to build up, and to inspire. This it does for the lawyer as well as for the educator or business man.

2. The Law.

Psychology is an inseparable characteristic of law. The science of mind and that of jurisprudence exist together. This is especially evident when we realize two facts: First, that psychology is the science of consciousness and behavior; and second, that the only object of law is the regulation of consciousness and behavior so that they may conform to the standards established by the sovereign power.⁸

The two mental processes which account for the origin of more laws than any others are habit, or custom, and reason. It is difficult to determine as to which of these processes in the past has held the greater influence. This is because it is not always possible to distinguish between habit and reason. We shall see in a later chapter that habit may be founded upon and caused by reason. On the other hand reason may use habits as factors with which

⁸ The object of law is stated in a different manner by Holland in his *Jurisprudence*, 12th Edition, page 80 where he says: "The immediate objects of Law are the creation and protection of legal rights." On page 82, legal rights are defined as follows: "We may

therefore define a 'legal right,' in what we shall hereafter see is the strictest sense of that term, as a capacity residing in one man of controlling, with the assent and assistance of the state, the actions of others."

to work. The common law offers an example for differences of opinion. Coke says, "Reason is the life of law; nay, the common law itself is nothing else but reason." Another author⁹ says that the common law comprises the body of those principles and rules of action, relating to the government and security of persons and property, which derive their authority solely from usages and customs of immemorial antiquity, or from the judgments and decrees of the courts recognizing, affirming and enforcing such usages and customs.

Today, probably, reason exercises a far greater force in the creation of new laws than does habit or custom.

Laws are created by minds. Both our judge-made laws and our statutory enactments are of this origin. When we see a law in print, we get but a very abstract idea of it. It has lost its personal touch. We probably do not know who enacted it. We probably do not know what were the considerations upon which the mental justification for enactment was based. All we see is the naked principle set forth. If we could, however, revitalize the law, and repossess it with all the mental actions which were originally bestowed upon it at its creation, we should see a very living creature. Every law is the brain child of mental action. Before a law can be made today it must first be conceived in some mind. Further, it must not only be realized by all the minds necessary to make it a law, but it must possess enough influence to persuade all who will arise, can pass it.

or "no." Certain

added. The answer

reply which might be

er fire was a beneficial

⁹ Henry Campbell Black, *Law Dictionary*, pp. 226-227.

All laws must have mental justification capable of defending them against attack. Mental justification is usually in the form of an idea of social justice. We endeavor to embody in our laws our present ideas of justice. Justice is, however, not a fixed term. As mental ideas change so do our ideas of justice change. The justice of today may not be the justice of tomorrow. What we believe to be right today may be wrong as we view it tomorrow. Thus the mental justification for a law today may fail tomorrow. How many laws are there on our statute books today which have not the mental justification to enable them to be enforced? The number is large. This seems very evident from the fact that many laws are not obeyed and are not enforced.

Laws are directed to minds as well as being created by them. The maxim "ignorance of the law excuses no one" shows this to be the case. Laws are directed to minds and it is the duty of those minds to learn the laws. Ignorance, a mental condition, can not be pleaded as a means of escape. Minds being the organ by which new ideas are realized and by which reason is effected, it is only logical that laws should appeal to the minds of those whom the law affects.

On the interpreting of the law and the settling of disputes which arise thereunder minds are again involved.

⁸ The objects are the means by which this is done. The a different manner. The his Jurisprudence with trained minds, who have been elected page 80 where he states the purpose of using their minds in the mediate objects of law, problems which are presented to them. creation and protection of rights." On page 82, legal practicing lawyer. By definition he are defined as follows: "What a man who works with his mind

rather than with his hands. He is an officer of the court before whom he appears on behalf of a client. He uses his mind to secure justice for his client. In the securing of justice he is called upon to know how minds work, how they may be controlled, and how they may be employed to serve his purpose better. It is for the better accomplishment of a lawyer's tasks that this book is presented. The first part is composed of the principles of psychology which a lawyer may find useful in the trial of a case; the second part is devoted to criminal peculiarities; and the third part is devoted to an improvement of the mental equipment of the lawyer himself.

3. Ethics.

At some places in this volume there may arise in your mind the question as to whether the full use of the principles of psychology in the conduct of a lawsuit may not lead one into violations of the code of professional ethics. For instance, is it ethical consciously to convey impressions to a jury by means of suggestion rather than by argument with facts? It is frequently done without being aware of it, but is it ethical to do it consciously? To take another example, is it ethical to appeal to the emotions of the jury rather than solely to their reason? It has been done time and again by the leaders at the bar. Is it ethical to do it consciously and intentionally?

These questions, like the others which will arise, can not be answered either by a direct "yes" or "no." Certain qualifications and explanations must be added. The answer would seem to be very similar to the reply which might be made to the question as to whether fire was a beneficial

force. If your house were burning you might think at the moment that fire was not such a beneficial thing. If, however, the fire were in the kitchen stove cooking your dinner you might be inclined, without much persuasion, to think that fire was indeed a beneficial thing. It is all a matter of where the fire is and what it is doing. If it is burning your house it is harmful, while if it is cooking your dinner it is beneficial. Thus, fire may perform either a destructive or a constructive task.

So it is with psychology in the courtroom. It may either hinder or assist the wheels of justice depending upon the manner and extent of its uses. 'Thus we might sanely conclude that the use of psychology is unprofessional if it tends to defeat justice while the use of it is professional if it does not tend to defeat justice. If the use of psychology is made to win a case which has no foundation in fact or law, then the use is unprofessional. I claim further that if a just case is lost through the lack of the use of psychological principles then the lawyer losing the case is just as unprofessional in his conduct as if he had been actually corrupt.

In considering the ethical aspect of the use of psychology in a lawsuit let us consider justice a moment. All of us know that frequently the justice found in our courts is not the pure and undefiled thing which it ought to be. Theoretically our courts ought to be likened to legal laboratories in which all side factors are controlled and in which the decisions are based solely on facts and laws. We have not, however, been able to eradicate, or equalize the force of the human element. Whichever side is the stronger in mental power, whether that power be in the personality of

the lawyer, or in the better presentation of the case, has the greater chance to win. How many juries discount one client's case because his lawyer is much the stronger? They should do so if they want to do justice between the parties. Abstract justice I mean, not what the jurors think is justice because the stronger lawyer makes them feel that way.

Here is psychology's greatest opportunity in a lawsuit. It can be made to step into the breach, and help to equalize the personal element, so that the decision will be based more on the uncolored facts and law of the case and less on the personalities of parties, lawyers, witnesses, judges and audience. Psychology can make justice more certain. If all lawyers were required to study the principles of psychology, and to learn the applications thereof so that both sides of every case were presented in the best psychological as well as best legal manner, the personal element would tend to become equal or eliminated. Greater justice would result because there would be a balancing of the human element.

The foregoing statement is, however, a rather visionary aspect. It is not true today. Some day, however, it will be. Today psychology may be used entirely professionally to make out the case so long as the use thereof does not tend to contradict or misrepresent the facts, the law or justice. Who will deny that this use is entirely professional?

A knowledge of psychology is necessary today not only to know how to present a just case so that it will have the greatest opportunity to succeed, but to know when the opposition is making unfair use of psychology, and to know how to meet it and prevent it. This is a vital need today.

Such knowledge makes a weak lawyer better able to take care of his client's interests, and makes a strong lawyer weak when he has a weak case.

Psychology is a force with which we have to reckon. Merely because that force may serve either a good or a bad end does not entitle us to say that we will have nothing to do with it. Even if we say that we will have nothing to do with psychology we can not carry out the statement because no one can practice any law at all without learning and following some of the rules of human nature and experience whether they be known as psychological principles or not.

As we control so many other factors of life, such as fire, water and narcotics, which may either be helpful or harmful, so we must control mental forces, stifling their harmful influences, and making them serve the good purpose which they may so easily do.

Many legal writers have urged that lawyers and particularly young ones, should learn the rules of human activity and behavior. Sometimes these writers have referred directly to these rules as principles of psychology but frequently they have called them rules of human nature or influence or some similar popular term.¹⁰

In conclusion of the consideration of the subject of professional ethics let me quote section 15 of the Canons of Ethics as adopted by the American Bar Association:

"15. How Far a Lawyer May Go in Supporting a Client's Cause.—Nothing operates more certainly to create

¹⁰ John C. Reed, *Conduct of Law Suits*, 2d Ed., pp. 10-15; Byron K. Elliott & William F. Elliott, *Work of the Advocate*; G. F. Arnold, *Psychology Applied to Legal Evidence*, pp. 13, 14.

or to foster popular prejudice against lawyers as a class, and to deprive the profession of that full measure of public esteem and confidence which belongs to the proper discharge of its duties, than does the false claim, often set up by the unscrupulous in defense of questionable transactions, that it is the duty of the lawyer to do whatever may enable him to succeed in winning his client's cause.

"It is improper for a lawyer to assert in argument his personal belief in his client's innocence or in the justice of his cause.

"The lawyer owes 'entire devotion to the interest of the client, warm zeal in the maintenance and defense of his rights and the exertion of his utmost learning and ability,' to the end that nothing be taken or withheld from him, save by the rules of law, legally applied. No fear of judicial disfavor or public unpopularity should restrain him from the full discharge of his duty. In the judicial forum the client is entitled to the benefit of any and every remedy and defense that is authorized by the law of the land, and he may expect his lawyer to assert every such remedy or defense. But it is steadfastly to be borne in mind that the greatest trust of the lawyer is to be performed within and not without the bounds of the law. The office of attorney does not permit, much less does it demand of him for any client, violation of law or any manner of fraud or chicane. He must obey his own conscience and not that of his client."

In using the rules of psychology it is wise for the lawyer to keep the foregoing quotation in mind.

An illustration of an unfair attempt to make use of psychology is found in the case of *The Warder, Bushnell & Glessner Co. v. Jacobs*, 58 Ohio St. 80. We will quote

enough of the opinion of the court to explain the character of the misconduct.

“The attorney for the plaintiff in the course of his argument to the jury as shown by the record, used the following language: ‘Gentlemen: The plaintiff is a poor woman. Your verdict against her will mean much, very much, but to the defendants, with all their wealth, residing in their magnificent castles in the city of Springfield, a verdict against them does not hurt them.’ * * * Certainly these remarks were of the most reprehensible character; and it is a matter of some surprise that the counsel should so far forget himself in argument to the jury as to commit such a breach of his privilege as is shown by the words used in this case. No heat of argument, nor zeal for his client, can be admitted as a palliation of such an offense against the fair administration of justice. * * * On the other hand, it is proper to say, that where remarks have been made not germane to the case, and calculated to arouse prejudice, or awaken undue sympathy, the case should be a very clear one on the evidence to warrant the court in disregarding them on a motion for a new trial. If, on a consideration of the whole case, there is room for doubt, whether the verdict was rendered upon the evidence, or may have been influenced by improper remarks of counsel, that doubt should be resolved in favor of the defeated party.”

PART I

TRIAL PSYCHOLOGY

CHAPTER I

THE APPEAL

At the outset in this, our psychological inquiry into the phases of human nature as found in a lawsuit, it is well that we make one definition in order to avoid later confusion. The word "appeal" will be used frequently in this and the next few chapters. Many definitions have been given to this word so that, if we wish to be in any measure exact, we must state the meaning we intend the word to have. As a rule when a lawyer thinks of appeal he thinks of that process by which a cause is removed from an inferior to a superior court for re-examination. That would be the legal meaning of appeal, but we do not employ the word here in that sense. When we refer to appeal we refer to its psychological meaning. Psychology defines an appeal as any application or supplication to human nature, such as is illustrated by the situation of a drowning man appealing to a bystander for help, or of a schoolboy asking aid of the teacher to help him solve his arithmetic problems. In a like manner, the presentation of an issue to a judge and jury, and the calling upon them to decide the question controverted is an appeal. Appeal is the psycho-

logical means of making out the case in whatever court the proceeding may then happen to be. It is the mental cause of action.

In an abstract sense we may say that the purpose of any appeal is to cause some particular action which might not otherwise occur. In a law suit this action consists of the trial of the case, and the adjudication of the rights of the respective parties. The ultimate and practical object of an appeal to justice through the instrumentality of a law suit is to secure the verdict and the judgment.

The appeal consists of all those factors throughout a case, from the time the first papers are filed until all rights are fully satisfied, which have any influence upon the minds of the judge and jury as to the merits of any matter in question. All mental stimuli offered the judge and jury by either party are but part of the appeal. If a party having the burden of making a successful appeal, makes no appeal at all, then that party can not possibly win the case, because there are no mental stimuli upon which the judge and jury may base decisions favorable to that party. The argument on a motion, the introduction of evidence, the impeachment of a witness, the interposing of an objection and the citation of a former case are parts of the appeal.

The major object of the appeal in every case is to win the suit. That much is evident. There are, however, throughout the trial many lesser objects of appeal, which are in a way individual appeals in themselves, and yet which are but steps in the major appeal. In an assumed case, let us say that the major object of the appeal is to recover a large sum of money for breach of contract. In

such a case the argument against the introduction of a deposition because of faulty execution would be a minor appeal. So would the impeachment of a witness or the argument to the jury of prejudice of a witness be minor appeals. They may be very vital appeals, but they are only minor ones except in occasional instances where the case of one of the parties may happen to depend absolutely upon them.

The appeal is the heart and soul of the case, and corresponds closely to what some writers refer as the theory of the case. If a lawyer will plan it carefully, and trace its operation and influence all through the case, he will find himself working in the light, not in the dark, toward a clearly conceived end by means of regular steps, the purpose of each of which is definite and certain.

That there may be no mistake as to what we mean by the appeal let us take several types of cases, and analyze the various possible appeals which there might be.

Probably the most simple type of case for this purpose is the divorce case in which the major basis for appeal is fixed definitely by statute. The law calls this appeal the ground for divorce. The following grounds for divorce, or grounds for appeal, are found in the divorce laws of different states in the United States. When one looks at the long list of different grounds for divorce one doubtless may think that a uniform divorce law in all states might be wise. Let us look at them a moment.

Adultery.

Bigamy.

Attempt at life of other.

Children abused.

Attempt to corrupt sons or daughters.

Children not taken care of.
Coercion.

Condemnation to infamous punishment.	Loathsome disease.
Crime against nature.	Miscegenation.
Divorce by which only one party is released from marriage obligation.	Nonsupport.
Dope fiend.	Personal indignities rendering life burdensome.
Excesses or outrages rendering life together insupportable.	Pregnancy of wife by other man.
Extreme cruelty.	Proposal of husband to prostitute wife.
Felony.	Treatment endangering life or reason.
Fraudulent contract.	Unchastity of wife before marriage.
Gross neglect of duty.	Ungovernable temper.
Habitual drunkenness.	Union with sect regarding marriage unlawful.
Husband a licentious character.	Vagrancy.
Incurable insanity.	Want of age.
Indignities.	Where marriage was to escape consequences of seduction.
Impotency.	Wife a prostitute.
Imprisonment in penitentiary.	Wilful absence.
Leper.	
Living apart for 10 years without cohabitation.	

Let us go on and consider the appeals in a type of case a little more complicated than that of the divorce case. Note the appeals in a first degree murder case. Here they are not so definitely fixed by statute. In such a case the defense might introduce some of the following appeals

either as the basis for an acquittal or in mitigation of sentence.

Abuse by police.	First offense—has been good citizen in past.
Accused was forced to make false confession.	Insanity or other mental disturbance whether of a temporary or permanent nature.
Accused was led astray by bad companions.	
Alibi.	
Circumstantial evidence only against accused.	Mistaken identity.
Consider family—children.	No intention to kill.
Corpus delicti unproved.	Not guilty.
Defended home or family.	No malice.
Defended self.	No premeditation.
Driven to crime by economic pressure.	Only an accomplice.
	Unwritten law.

The state in such a case, in order to convict the accused, or in order to prevent any mitigation of sentence, might make use of such points as the following in their appeal:

Accomplice equally guilty.	Crime has been committed.
Accused killed with intent to kill.	Evidence conclusive.
Accused killed with malice.	First offense is no defense.
Accused killed with premeditation.	Identity of accused certain.
Confession voluntary.	Justice requires punishment and conviction.
Consider family of deceased.	Menace to society—might kill again.
Conviction necessary as deterrent.	No defense of self or family.
Conviction necessary as protection to society.	No mental disqualification.

These appeals for a first degree murder case are not all that might be employed. Many others might be evolved which would be just as satisfactory as the ones listed. Of course the appeal must come within the facts and within any statutory limitation which there may be. Even so, there are usually enough appeals available so that some discrimination must be used to select the appeal or appeals upon which the case must stand or fall. Shall a divorce be asked for on the grounds of cruelty, or nonsupport or desertion? Shall the accused plead self-defense, or insanity or unwritten law, or shall he depend on the mercy of the court? Shall the plaintiff sue on the contract or in tort? Which will be best toward securing the desired result? Which of them have the greatest inherent mental appeal to the minds of the judge and jury?

There were three purposes in mind when the foregoing lists of appeals were given. First: The lists were given in order that the reader might clearly understand what was meant by appeal. Second: It was hoped that the reader would observe that there were frequently several appeals which might be used, among which some choice must be made. Thus the question would automatically arise as to which appeal would be best. In determining the best appeal we must first look to see whether the facts of evidence and the rules of law will support one appeal as well as another, and then we must look to see which appeal will have the greatest mental effect upon those (the judge and jury) whose minds must be influenced before the case can be won. Psychology teaches us that some appeals have a greater inherent mental persuading power in themselves than have

others. We will analyze this situation in the remainder of this chapter, so that we may learn to determine those mental factors upon which the strongest appeal can be based. Third: The writer hoped that when the best appeals had been chosen that they would be kept in mind until the next chapter, when the subject is gone into as to the best way of presenting them to the judge and jury.

Let us assume for the moment that the facts of evidence and the rules of law will equally support two different appeals. Which appeal shall we use? We may, of course, want to use both of the appeals if they do not conflict with each other, but we will want to know which is better, because it will make our case easier to win if we make the better appeal the prominent one. Let us keep in mind that the object of the appeal is to win the case, and that the only way that the case can be won is to persuade the minds of the judge and jury to lean our way. Thus we must determine which appeal will have the greatest effect upon the minds of the judge and jury. In determining this we must analyze the minds of the judge and jury to see what it is that causes them to give the verdict and judgment to one party and not to the other.

One party to a suit wins the suit because, after hearing the evidence of the case, the judge and jury will that that party shall win. Willing is nothing more and nothing less than the power of making decisions or of choosing what to do among several possible alternatives.¹ In the case of

¹ James Rowland Angell, *Introduction to Psychology*, p. 237; Walter Dill Scott, *Psychology of Advertising*, p. 195.

a law suit the alternatives are the parties (as expressed by their respective prayers), and the choosing has to do with the selection of the party to win. The selection of the party is in turn based upon a selection of the evidence which will be given the greater weight and upon a selection of the rules of law which will be followed.

But why, you will ask, do the judge and jury will that one party and not the other shall win the suit? They do not do it arbitrarily. They must have some reason or cause. This reason or cause is termed a motive.² Motive is the entire force or influence which persuades, moves, excites or invites the mind to volition.

As the judge and jury receive the stimuli of the appeal, motives arise in their minds which will cause them to decide the case in favor of one of the parties. Some motives may arise which favor one party, and some which favor the other. It is the preponderance of strength of motives which causes one party to win and the other to lose.

If the case is one involving an interpretation of the law, we hope that the preponderance of motives will be based on the correct interpretation of the law. If the case is one involving a dispute over facts, we hope that the preponderance will be based on a preponderance of the evidence in a civil case, and evidence of guilt beyond a reasonable doubt in a criminal case. This is substantially true, yet all the other stimuli of the appeal exercise some influence in the creating of motives.

One of the most important things the prosecution has to

² William James, Psychology, Briefer Course, p. 428.

do in a criminal case is to establish a motive for the crime charged.

The appeal, in order to be most effective, must coincide with the most powerful motives and arouse them to action. Two excellent tables of motives have been prepared which we will quote. The first is by Starch,³ who secured the introspective examinations of 74 men and women. They rated the strength of motives on a scale of from 0 to 10. A table of the results obtained shows the relative power of the following common motives to be as follows. Examine them very carefully particularly as to order and relative strength.

Motives	Per Cent.	Motives	Per Cent.
Appetite—hunger	9.2	Rest—sleep	7.7
Love of offspring	9.1	Home comfort	7.5
Health	9.0	Economy	7.5
Sex attraction	8.9	Curiosity	7.5
Parental affection	8.9	Efficiency	7.3
Ambition	8.6	Competition	7.3
Pleasure	8.6	Cooperation	7.1
Bodily comfort	8.4	Respect for duty	7.1
Possession	8.4	Sympathy for others	7.0
Approval by others	8.0	Protection for others	7.0
Gregariousness	7.9	Domesticity	7.0
Personal appearance	7.8	Social distinction	6.9
Taste	7.8	Devotion to others	6.8
Safety	7.8	Hospitality	6.6
Cleanliness	7.7	Warmth	6.5

³ Daniel Starch, *Principles of Advertising*, pp. 272, 273.

Imitation -----	6.5	Manipulation -----	6.0
Courtesy -----	6.5	Construction -----	6.0
Play—sport -----	6.5	Style -----	5.8
Managing others -----	6.4	Humor -----	5.8
Coolness -----	6.2	Amusement -----	5.8
Fear—caution -----	6.2	Shyness -----	4.2
Physical activity -----	6.0	Teasing -----	2.6

The second table, called "The Table of Persuasiveness," has been prepared by Hollingworth.⁴

The Table of Persuasiveness.

Showing the relative strength of various appeals to instincts and interests as determined by experiments on the pulling power of advertisements.

The highest possible value is 100, the lowest is 0. Values range thus from 0 to 100, the appeal indicated by the highest number being the strongest in pulling power. The actual values range from 4 to 94, with either men or women, and from 10 to 92 when men and women are combined.

Appeal	Strength	Appeal	Strength
Healthfulness -----	92	Safety -----	80
Cleanliness -----	92	Durability -----	78
Scientific construction --	88	Quality -----	72
Time saved -----	84	Modernity -----	72
Appetizing -----	82	Family affection -----	70
Efficiency -----	82	Reputation of firm -----	58

⁴ Tipper, Hotchkiss, Hollingworth & Parsons, Advertising, 2nd Ed., pp. 78, 79.

Guarantee -----	58	Hospitality -----	42
Sympathy -----	54	Avoid substitutes -----	32
Medicinal -----	50	Clan feeling -----	18
Imitation -----	50	Nobby, etc. -----	16
Elegance -----	48	Recommendation -----	14
Courtesy -----	48	Social superiority -----	12
Economy -----	48	Imported -----	10
Affirmation -----	42	Beautifying -----	10
Sport -----	42		

If we combine these tables and split differences wherever they occur, we should get the following result:

Appetite—hunger -----	92	Rest—sleep -----	77
Health -----	91	Home comfort -----	75
Love of offspring -----	91	Curiosity -----	75
Sex attraction -----	89	Construction -----	74
Parental affection -----	89	Competition -----	73
Ambition -----	86	Quality -----	72
Pleasure -----	86	Modernity -----	72
Cleanliness -----	85	Cooperation -----	71
Bodily comfort -----	84	Respect for duty -----	71
Possession -----	84	Protection for others -----	70
Time saved -----	84	Domesticity -----	70
Appetizing -----	82	Family affection -----	70
Approval by others -----	80	Social distinction -----	70
Safety -----	79	Devotion to others -----	68
Gregariousness -----	79	Warmth -----	65
Efficiency -----	78	Managing others -----	64
Taste -----	78	Sympathy for others -----	62
Personal appearance -----	78	Economy -----	62
Durability -----	78	Coolness -----	62

Fear—caution	62	Medicinal	50
Physical activity	60	Elegance	48
Manipulation	60	Affirmation	42
Imitation	58	Shyness	42
Style	58	Avoid substitutes	32
Humor	58	Teasing	26
Amusement	58	Clan feeling	18
Reputation of firm	58	Nobby, etc.	14
Guarantee	58	Recommendation	12
Courtesy	57	Imported	10
Play—sport	54	Beautifying	10
Hospitality	54		

These lists of motives, while prepared for the study of the psychology of advertising, offer a great deal of assistance to the lawyer, as many of the same motives are involved in both advertising and the trial of law suits. The motives, however, which are found in the courtroom, far surpass in number the motives to which the advertiser appeals. Indeed, it seems that the whole and complete list of human motives, innumerable as they are, may play a part in the trial of cases.

To get some idea of the ramifications of life, from whose branches the innumerable motives arise, refer to a tabular synopsis of categories such as may be found in Roget's Thesaurus. With this table before one's eyes, there is little need to use the imagination in order to comprehend the wide range of motives there may be.

We must, however, remember when we consider these tables of motives that they are not always fixed quantities but that they vary from individual to individual in accordance with the variations of heredity and environment.

Some motives such as hunger, health and pleasure do not vary to any material extent, while others, such as ambition, personal appearance, and courtesy, may vary widely.

The stronger the motive with which you can tie up your appeal in the minds of the judge and jury the better off you will be. Conversely, the stronger the appeal with which you can show that your opponent's appeal conflicts the better off you will be, also. The same appeal may frequently be used to stimulate a number of motives if cleverly used. The problem is to stimulate the more powerful ones.

We may carry the analysis of the mental basis of the appeal still further if we wish. We have seen so far that the appeal stimulates motives, as otherwise the judge and jury would have no basis for their actions. Motives are not, however, mental elements. They depend on other mental processes for their existence. We may thus analyze motives, and see of what they consist.

Psychologists are fairly well agreed that instincts are motives. Indeed, some psychologists⁵ believe that directly or indirectly instincts are the prime movers of all human activity. Other psychologists believe that other factors besides instincts play an important role as motives to action. Some believe that desires and wants are also motives.⁶ I believe that in a suit motives are composed of

⁵ William McDougall, *Introduction to Social Psychology*; I. Edman, *Human Traits*, p. 19.

⁶ In *Advertising, Its Principles and Practice*, 2nd Ed. by Tipper, Hotchkiss, Hollingworth & Parsons, on pages 64-66, the appeal is divided into (1) elementary in-

stincts, usually modified or elaborated, (2) elaborate traditions, customs, and sanctions, and (3) social values such as ideals of style, fashion, prestige, exclusiveness, propriety, etiquette and all the vagaries of the leisure class and the dilettante. We must re-

and founded upon instincts, with their associated and resulting emotions, and reason.

"In trying a case before a jury a lawyer often appeals to the instincts and emotions of the jury, but when he is arguing before the judge in his chambers or in Courts of Appeals, where there are no juries, he emphasizes facts and law. If the judge feels any emotion, he tries not to allow it to influence his action."⁷ We will observe the nature of instincts, emotions and reason.

Instincts are inherent, inborn and unlearned tendencies to act.⁸ They are present at birth although possibly not in their full development, and usually become modified as they develop.⁹ Eating, collecting, fighting and display are examples of instincts.

The purpose of instincts in the plan of creation seems to be to protect the individual, and thereby to preserve the race. That at least is the main end they serve and inasmuch as they are due to no conscious effort, to no learning or to no desire on the part of the individual, there is no other explanation of their purpose. Man could not exist without instincts, and therefore instincts are universal in all. If there were no instincts man could not pass the stage

member that these bases of appeal were developed from the standpoint of advertising, but we must also remember that advertising psychology bears a very close resemblance to legal psychology and can teach the lawyer many useful lessons.

⁷ Brewster & Palmer, *Introduction to Advertising*, p. 95.

⁸ I. Edman, *Human Traits*, pp. 2, 18; Arthur I. Gates, *Psychology for Students of Education*, p. 118.

⁹ Arthur I. Gates, *Psychology for Students of Education*, pp. 110-118.

of early childhood. If fire did not burn, if falls did not bruise, if pins did not stick, if sex behavior were not present and if parental behavior were absent, the child would have no chance at all. He would not even be born, let alone nourished and cared for until he reached maturity and reason.

As instincts, therefore, play such an important part in the preservation of the individual, it is only natural that they should lend color to all acts and deeds. Man likes to think of himself as a being guided by reason rather than by instincts, and he likes to distinguish himself from the dumb brutes for that reason, and yet man has deceived himself. He reasons far less than he really imagines.¹⁰ The instincts of the primordial animal are still so strong that even today they are not submerged, but bear only a thin coating of the veneer of civilization acquired through the passage of centuries.

In the appeal to motives founded on instincts the lawyer will find an irresistible power, for such an appeal strikes the vital and inherited chords of response. If, for instance, the state's attorney can appeal to the jury through the instinct of fear of the accused there will be a greater chance of securing a conviction than there would be if instinct were not the basis of the appeal.

Many different classifications of instincts have been made. The list which particularly appeals to the author is that by Starch.¹¹

¹⁰ Walter Dill Scott, *Psychology of Advertising*, p. 175.

¹¹ Daniel Starch, *Principles of Advertising*, p. 259.

The list is given herewith:

I. Food—getting and protective responses.

1. Eating—appetite, taste, hunger.
2. Reaching, grasping and putting objects into the mouth.
3. Acquisition and possession.
4. Hunting—cruelty.
5. Collecting and hoarding.
6. Avoidance and repulsion.
7. Rivalry and cooperation.
8. Habitation—comfort.
9. Responses to confinement.
10. Migration and domesticity.
11. Fear—timidity, caution.
12. Fighting.
13. Anger.

II. Responses to the behavior of other human beings.

14. Parental behavior.
15. Gregariousness—sociability, loneliness, hospitality.
16. Attention to other human beings.
17. Attention—getting.
18. Responses to approving and scornful behavior.
19. Responses by approving and scornful behavior.
20. Attempts at mastering and submissive behavior.
21. Display—ornamentation, beauty, pride in appearance.
22. Shyness—modesty, reserve.
23. Sex behavior.
24. Secretiveness and confession.
25. Rivalry—competition.
26. Cooperation—loyalty, faithfulness.

- 27. Suggestibility and opposition.
- 28. Envy and jealousy—cunning, intrigue.
- 29. Greed.
- 30. Kindliness—sympathy, sorrow, pity.
- 31. Teasing, tormenting, bullying.
- 32. Imitation.

III. Miscellaneous.

- 33. Visual exploration.
- 34. Manipulation—constructiveness.
- 35. Cleanliness.
- 36. Curiosity.
- 37. Multiformal mental activity.
- 38. Play—sport, joy, humor.

The second class of motives which persuade the judge and jury to favor a certain party to the suit is known as emotions. Emotions are feelings of a general nature in contradistinction to local feelings of a particular part of the body.¹² They are inherited responses to arousing stimuli, and seem to bear a very close relation to instincts.¹³ "Some writers have gone so far as to say that emotion is simply the psychological side of an instinct, it is what we feel when we perform certain kinds of instinctive acts."¹⁴ They are always associated with instincts and probably are caused by them.

The utopian idea of a law suit is one in which emotions are entirely absent. This is never the case, however. In

¹² Arthur I. Gates, *Psychology for Students of Education*, p. 158.

¹³ William James, *Psychology, Briefer Course*, p. 373. An instinct is the basis of a corresponding emotion according to Tipper,

Hotchkiss, Hollingworth, & Parsons, in *Advertising*, 2nd Edition, p. 73.

¹⁴ James Rowland Angell, *An Introduction to Psychology*, p. 204.

every case, emotions play their part as a motive toward deciding as to which party shall be the successful one. The main reason why emotions must be watched so carefully is because they tend to cause actions which are not based on judgment and reason. At the same time they cause a decrease in the ability to think or to reason.¹⁵

The lawyer who would watch the interests of his clients must recognize the emotions in order that he may prevent the unfair use of them by his opponent, and in order that he may make the best use of them himself.

The following suggestive, though not exhaustive list of instincts, the emotions which they arouse and the sort of behavior which they prompt in us, is given from the viewpoint of the business man in an excellent work on advertising.¹⁶ We will quote it here as it is valuable to the lawyer:

**The Instinct and Its
Corresponding Emotions.**

1. **A p p e t i t e** (Hunger, Tastefulness, Sensual Enjoyment).

**The Sort of Behavior
to Which It Prompts Us.**

To gratify and exercise the senses and to continue the stimulation for a reasonable length of time or so long as the stimulation remains pleasant.

¹⁵ Arthur I. Gates, *Psychology for Students of Education*, pp. 169, 170.

¹⁶ Tipper, Hotchkiss, Hollingworth, & Parsons, *Advertising*, 2nd Ed., pp. 75, 76.

2. Comfort (Calm, Restfulness, Relaxation, Ease). To avoid pain of any kind, by flight, by removal of the stimulus, or by various overt acts of evasion or aggression.
3. Sex (Passion, Lust, Love, Coquetry). Definite responses toward the opposite sex in general or toward particular members of it.
4. Devotion (Faithfulness, Loyalty, Affection). To protect and be loyal to our dependents or to those with whom we have long been pleasantly associated, as in family, school or community life.
5. Play (Merriment, Playfulness, Sport, Joy, Humor, etc.). To work off superfluous energy, either alone or in combination with others, and to enjoy this process either in action or in contemplation.
6. Fear (Timidity, Fearfulness, Anguish, Caution). Retractable or inhibitory reactions before definitely dangerous objects, as indicated by the experience of the race.

7. **Acquisitiveness** (Propriety, Selfishness, Stinginess, etc.). To accumulate and store up objects, either with or without particular value. To save, to bargain, etc.
8. **Hunting** (Cruelty, Eagerness, etc.). To pursue and destroy various objects, especially if they are inferior in power and in motion. Related to combativeness and playfulness.
9. **Sociability** (Lonesomeness, Sociableness, Hospitality). To be gregarious, to form groups, to have chums, and to react to the adjustments of other members of our group.
10. **Competition** (Emulation, Jealousy, Ambition, etc.). Conquest, leadership, domination of inferiors, rivalry with equals, and jealousy of superiors.
11. **Curiosity** (Inquisitiveness, Longing to know). To examine novel objects for which ready made protective responses are felt to exist. Explorative and investigative conduct.

12. **Shyness** (Modesty, Bashfulness, Reserve). To avoid strange objects and situations which are felt to be superior yet well disposed, and for which there is uncertainty of protective response.
13. **Ornamentation** (Beauty, Display, Pride in Appearance). To decorate one's person or one's belongings, and to exhibit them in a favorable light.
14. **Imitation.** More or less general tendencies to act as others act, to behave with the crowd, etc.
15. **Revenge** (Anger, Hatred, Resentment). To resent, by overt act or otherwise, the aggression of others against ourselves or against those to whom we are devoted.
16. **Cleanliness** (Purity, Decency, Wholesomeness). To conceal or remove filth from one's person or from one's belongings.
17. **Worship** (Piety, Reverence, Faith). To reverence, do obeisance to, and feel subordinated to the hopelessly superior.

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|--|---|
| 18. Constructiveness. | To build, create, invent, and construct, for the sheer pleasure of manipulation and success. |
| 19. Sympathy (Sorrow, Pity, and their allies). | To aid unfortunates, especially those who suffer in ways in which we have ourselves suffered. |
| 20. Cunning (Secrecy, Intrigue, Slyness). | To plan in secret, to circumvent, to use strategy. |
| 21. Pride (Haughtiness, Conceit, Proudness, etc.). | To favor our own work, possessions, abilities, etc. |
| 22. Gratitude (Thankfulness, Gratefulness, etc.). | To feel and act well disposed toward the sources of our pleasure. |
| 23. The Comic (Laughter, Amusement, Hilarity). | This instinct shows itself chiefly in the tendency to tease or banter, or to enjoy seeing others teased or bantered by other people or by nature. |



The facial expression of a few common emotions. (Gates' Psychology for Students of Education, after Ruckmick.)

24. Harmony, (Symmetry, Proportion, Balance, Stability, etc.). The tendency to continue or effect arrangements in time or space, which display such qualities as those indicated, including rhythm, melody, etc.

Inasmuch as emotions are the result of instincts, we must first arouse the associated instinct if we wish to arouse a particular emotion.

The emotions may be controlled or subdued by a pause without further stimuli. They will die of their own accord in time. The main method is, however, to resort to reason, if possible, and to show by orderly thought that the emotions are unjustified, must be controlled and must be disregarded in a court of law. It is sometimes possible to take an emotional jury, and cause the pendulum to swing to such an opposite extreme as to cause the jury to decide exactly opposite to their emotions. When they do so decide it is because their reason has been built up until it is stronger than their emotions.

Reason is the third factor which may be the motive or part of the motive which influences the will of the judge or jury to favor one party to a suit and not the other one.

Reasoning is rational thinking by the use of concepts and judgments whereby a believed conclusion, termed an inference, is reached.¹⁷ Conscious conviction is the end desired, and it is the end conceived of as that upon which our system of justice must stand or fall.

¹⁷ Howard C. Warren, *Elements of Human Psychology*, p. 323.

When a lawyer reasons with a judge or jury, he presents the facts with as strong a support as possible for them, and he shows how the facts should and must be connected so as to produce the sound conclusion which he desires. We will see more of reason in a later chapter where its characteristics will be gone into thoroughly and completely.

Let us recapitulate the nature of the appeal.

1. The will of the judge and jury is what causes them to decide for one party and against the other.
2. The action of the will is based on motives.
3. Motives in a law suit are instincts, with the associated emotions, and reason.

Not all appeals which human nature would permit are allowed by law. Statutory enactment in many cases determines which ones can be permitted in certain cases. Thus the divorce laws in each state limit the grounds or appeals for divorce, and unless the pleadings adhere to these specifications the case is thrown out of court. Likewise the rules of evidence prohibit some appeals. It is unprofessional conduct to attempt to use appeals which will serve only to prejudice the minds of the jurors. Certain kinds of evidence which make possible unfair appeals are also prohibited. The pleadings themselves, after they have been filed, tend thereafter to limit the appeals which may be used in the trial, because no appeal can be used and no evidence introduced unless a basis is laid therefor by the pleadings.

The choice of appeals depends on many factors. Those limitations which have just been given must first be taken into consideration. Then the facts of the case become the

next determining condition. An appeal can not be maintained which has not the facts of evidence to support it. An appeal must not be chosen which is contrary to the facts. It must be maintainable by the facts, but often the same facts will support any one of a number of appeals.

The parties to suit sometimes have a great deal to do with the selection. Where a soulless corporation is on one side and where a tender and unprotected child or an attractive woman is on the other, the appeal might properly be different than what it would be if the parties were both men.

Popular opinion of the street may influence the appeal in exceptional cases. A sensational trial may thus require one appeal even though another appeal might otherwise be better. Thus one accused of murder might want to appeal to temporary insanity instead of to mercy or self-defense.

The three questions which the lawyer must answer in choosing the appeal for each case are: (1) What appeals are there? (2) What appeals does the case allow? (3) Which of these are best to use, considering their inherent mental persuading power as well as the number and strength of the facts supporting them?

CHAPTER II

PRESENTING THE APPEAL

In the previous chapter we discussed the psychological nature of the appeal and the practical ends which it serves. There we saw that the appeal is composed of all those influences used to arouse action of the will by the stimulation of mental processes. We further saw that the appeal is always to human motives which are composed either of instincts, emotions or reasons or a combination of them. Our entire object was to show the inherent characteristics of the appeal. At no time did we discuss the means by which it may be presented. We saw what it was and what it tried to do, but we did not see how it might be employed. This we shall endeavor to show here. We shall take the appeal as we find it, and explain how we may employ the principles of psychology to present it most effectively for the purposes of the court lawyer.

The means of presenting the appeal may be divided in two parts; namely, legal and psychological.

The legal means of presenting the appeal is familiar indeed to the lawyer. This part includes those mechanical devices such as pleadings, motions, evidence, argument, etc., which the law provides for use in preparing and conducting the case. So well known are they to the lawyer that any detailed discussion of them here would be exceed-

ingly trite. We will pass over them without explanation.

The psychological part of presenting the appeal is our main concern. There would be no need for this chapter if there were no systematized applications of human nature which might be of advantage to assist in stimulating mental action.

Let us make no mistakes in believing that the psychological means of appeal is separate and distinct from the legal means. Such is not the case. The psychological means of appeal is clothed and embodied in the legal instruments of appeal. There is no separation between the two unless we draw a distinction by saying that the legal means of appeal concerns form, while the psychological means concerns substance. We might even say that the legal means is the vehicle of thought, while the psychological means is the thought itself.

The psychological means of appeal employs the two mental processes of suggestion and argument.¹ They are the two means by which the necessary thoughts are transmitted from the mind of counsel to the minds of the judge and jury. They are not thoughts themselves, but they are methods or systems of the use of thoughts. The results of their use is that the thought itself is conveyed when argument is used, and the thought creates a desired other thought in the case of suggestion, almost in a manner comparable to that by which a current of electricity is induced

¹ Legal psychology parallels advertising psychology at this point and we will borrow the methods of the advertising psychologist. A. J. Snow, *Psychology in Busi-*

ness Relations, pp. 313-337; Brewster & Palmer, *Introduction to Advertising*, p. 93; Walter Dill Scott, *Influencing Men in Business*, 2nd Ed.

from one coil to another without connection between the coils other than that existing in the lines of force which the one radiates.

In giving some familiar illustrations of suggestion, one author² says, "In the courtroom the skillful attorney suggests to the witness the bit of evidence which he desires to elicit, and often obtains a favorable verdict from the jury quite as much by suggestion as by proof."

Every court lawyer has come into contact with suggestion. The most common illustration is that of the leading question, called suggestive interrogation by some authors. A witness is asked a leading question. Immediately an objection is interposed by the opposition. The reason the question is objected to is because it is so framed as to transmit to the witness an idea of the answer which is desired. That is, it is suggestive of the answer desired.

"A noted criminal lawyer secured the acquittal of a woman who was accused of having poisoned a whole family. He advised her to appear in court every day with her little baby in her arms. This suggested to the soft-hearted jurymen that no woman who had a baby of her own would kill the babies of other women; it also suggested that if she went to the electric chair her baby would be an orphan."³

An authority⁴ states that suggestion is the intrusion into the mind of an idea; met with more or less opposition by the person; accepted uncritically at last; and realized unre-

² Bernard C. Ewer, *Applied Psychology*, p. 70.

tion to Advertising, pp. 93, 94.

⁴ Boris Sidis, *The Psychology*

³ Brewster & Palmer, *Introduction of Suggestion*, p. 15.

flectively, almost automatically. Another author⁵ states that by suggestion is meant a great class of phenomena typified by the abrupt entrance from without into consciousness, of an idea or image which becomes a part of the stream of thought and tends to produce the muscular and volitional efforts which ordinarily follow upon its presence. By both of these definitions it is readily seen that suggestion is simply the method by which a person, even though hostile at first, is compelled to accept an idea as true without question or reason. It amounts to forcing a person to believe some fact without proof, for that is what it really does. The question is as to whether such a method is professional or unprofessional. Certainly it is widely used, and unless the resulting suggestion is false or too direct, there would seem to be little objection to it under the present system of ethics.

The following illustration of suggestion which the writer has actually seen performed in a large eastern city may be familiar to the reader as well. Some impish wag deciding to have some fun stops at the intersection of two busy streets. Standing close to one curb he starts to look up at the tall building on the opposite corner. He may even point up. For a second no one may pay attention to him. Then some one sees where he is looking, and the person tarries a moment to look the same direction. In no time a crowd has gathered, all intent in finding at what the other people are looking. The scalawag who started the blockade has in the meantime gone his way with a chuckle, little realizing

⁵ James M. Baldwin, *Mental Development*, 3rd Ed. Rev., pp. 101, 102.

that he has very successfully used some applied psychology.

Take an illustration of suggestion drawn from the courtroom. The defendant is charged with burglary. No one actually saw the act committed. There is no positive proof of the guilt of the accused. The evidence is circumstantial. The defendant introduces evidence to show that he was at some other place at the time the alleged act occurred. If this evidence is of any weight, there is an immediate suggestion that the defendant was not at the scene of the crime, and hence is not guilty. Of course the defense of alibi may be the basis for argument, but there is a suggestion of innocence long before the stage is set for argument.

A great deal of the first effect of testimony is due to the force of suggestion. At best the jury finds it difficult to reason with the facts as they are presented, for the facts are frequently obscured, mixed up and unrelated until straightened out by the argument of counsel. Where such a condition exists, suggestion becomes very powerful, for not only does it create the first impression but the one which is remembered.

Suggestion may occur where the facts are not sufficient to justify reason. Indeed some of the most unfair suggestions may be drawn from facts which are not sufficient as a basis for argument. This condition sometimes exists at the close of the direct examination of a witness. The witness, in accordance with the questions of counsel, has stated only those facts which are favorable to the side which has called him as a witness. Certain facts may have been omitted which are necessary in order that the proper conclusion may be drawn. Unless cross-examination completes

the narrative of the witness, the jury will take the facts as given, and by the means of suggestion will add the connecting links. This type of suggestion obviously creates false and misleading impressions. One of the duties of counsel is to complete the narrative of the witness in those instances where it is necessary.⁶

Everyone is susceptible to the subtle influence of suggestion. Women yield to its effect more readily than do men, while children are the most suggestible of all.⁷ Even combinations of individuals are sensitive to suggestions.⁸ Witness the fact that mob violences and religious revivals depend for success in a large measure upon social suggestibility. Juries as a whole have been swayed in a similar manner. Individual identity has been lost and the jury acting as one mind rendered a unitary verdict.

There are two kinds of suggestion, abnormal and normal.⁹ Abnormal suggestion is that which accompanies abnormal mental states or an abnormal condition of mind,¹⁰ such as hysterical, hypnotic or somnambulic mental states. It is readily seen, that with such limitations, abnormal suggestion is of little value to the court lawyer.

Normal suggestion is the ordinary and common kind

⁶ John C. Reed, *Conduct of Law Suits*, 2nd Ed., p. 320.

⁷ Walter S. Hunter, *General Psychology*, Rev. Ed., p. 109; Norsworthy and Whitley, *Psychology of Childhood*, p. 125; Boris Sidis, *Psychology of Suggestion*, p. 362. See also Bernard C. Ewer, *Applied Psychology*, p. 82.

⁸ Walter Dill Scott, *Psychology*

of Advertising, p. 174; Boris Sidis, *Psychology of Suggestion*, pp. 310, 311; Bernard C. Ewer, *Applied Psychology*, p. 79.

⁹ Boris Sidis, *Psychology of Suggestion*, p. 18; Bernard C. Ewer, *Applied Psychology*, pp. 76-78.

¹⁰ See Boris Sidis, *Psychology of Suggestion*, p. 18.

such as we observed in the case of the boy causing the crowd to gaze into the air, and in the case of the suggestion of innocence through the defense of an alibi. These are the kinds of suggestions the lawyer meets, and these are the kinds with which he must be familiar. Otherwise he will not know how to meet them when they hinder him, and he will not know how to employ them when his case requires their use.

Suggestion may be accomplished by either direct or indirect methods. In the direct method an order is given without concealing the ultimate end to be served. This is not possible in all instances. Except in occasional situations, it can not be used, as the mind is seldom receptive to commands without some resentment. In the case of hypnotism, direct suggestion is nearly always used. The subject is commanded and ordered to do this and do that. It is then impossible for the subject to refuse to obey the order if he is well in hand. This condition does not exist in the courtroom. Hypnotism is out of the question. In those cases, however, of great moment, where the emotions are already aroused, it is possible to use what is closely akin to, if not actually composed of direct suggestion. This consists of a forceful statement. Such an expression carries a far greater suggestion of truth than does a weak and dilatory one. I once heard a law professor make a statement that in the years past a large degree of the success attained by eminent lawyers at the bar depended on the forceful presenting and plausible maintaining of their cases. A similar condition exists today except that we may possibly scrutinize the proof a little more carefully. A forceful

statement still carries suggestion of authority and truth. Direct suggestion occasionally is observed in court. Lawyers have been known to tell the jury in no unmistakable terms what they should do, of course, however, only after the jurors were sufficiently controlled mentally.

Walter Dill Scott¹¹ has written an interesting chapter on "The Direct Command." He says that mankind as a whole is influenced more by commands than by logical processes of thought, and furthermore, that while we do obey commands, we are unwilling to admit it.

Indirect suggestion is, on the whole, more important, more frequent and more effective. It hides its ear-marks by its indirectness. To the ordinary eye the results only, not the means, are observable. The speech of Mark Antony at the funeral of Caesar, a large part of which is quoted in a later chapter,¹² is full of indirect suggestions at the start, and direct suggestions at the close. The suggestion of innocence created by a plea of alibi is an instance of indirect suggestion. In fact any suggestion accomplished by concealed means is indirect suggestion.

Sidis¹³ conducted a number of experiments with the suggestions created by ideas. Thus he found that certain factors created were more impressive and more suggestive. The main questions of repetition, frequency, coexistence and last impression were investigated. The results showed that some of the factors were more efficient than others. Thus, for instance, frequency was over twice as effective

¹¹ Walter Dill Scott, *Psychology of Advertising*, pp. 233-246.

¹² Chapter VIII, Words, page 255.

¹³ Boris Sidis, *The Psychology of Suggestion*, pp. 28-34.

in producing suggestion as was repetition. Sidis gives the following table to show the effectiveness for suggestion of the various factors:

	Per Cent.
Frequency and last impression_____	75.2
Last impression _____	63.3
Frequency _____	42.6
Coexistence and last impression _____	18.3
Repetition _____	17.6
Coexistence _____	6.6

Summing up the value of this experiment in one terse statement, Sidis says, "Of all the modes of suggestion, however, the most effective, and the most successful, is a skillful combination of frequency and last impression." The lawyer will be wise to remember this rule. Where last impression is coupled with greatest frequency, the power of suggestion and impression are the greatest. Last impression deserves a word or two. It is almost as effective alone as when coupled with frequency. It is the most effective single suggestive force available.

All people are vain and conceited to a certain degree. All like to feel that they found things out for themselves rather than to feel that they were told. Thus through suggestion if you can make the jury feel that they have discovered the point, you have made an advantageous step. One of the values of suggestion then is that it allows a person to be told something without that person realizing that he is being told.

An interesting table of the conditions upon which normal and abnormal suggestibility depend, is given by Sidis.¹⁴

Normal Suggestibility	Abnormal Suggestibility
1. Fixation of attention.	1. Fixation of attention.
2. Distraction.	2. ———
3. Monotony.	3. Monotony.
4. Limitation of voluntary movements.	4. Limitation of voluntary movements.
5. Limitation of the field of consciousness.	5. Limitation of the field of consciousness.
6. Inhibition.	6. Inhibition.
7. Immediate execution.	7. ———

The second psychological means for presenting the appeal is by argument. The first means was suggestion. In suggestion there were no arguments presented or considered, and the end was accomplished without proof. In this respect argument is the opposite of suggestion, for argument requires manipulation of facts in order to be argument. It requires at least some vestige of proof.

When we speak here of argument we are not confining ourselves to the arguments of counsel as given at the close of the case or the arguments to the court when an objection has created a dispute over a legal technicality. These, of course, are part of the total psychological aspect of argument, but they are only part. The remainder of the argument is found in the pleadings, the evidence, the motions, etc. All parts of the case which contain statements of facts, or propositions, or suggestions of these, about which reasoning may take place are part of the argument.

¹⁴ Boris Sidis, Psychology of Suggestion, p. 87.

The aim of the argument is to stimulate the thought to produce a certain definite conviction. It is the portrayal of favorable facts in such a manner that only one conclusion can be drawn. Thus each pleading is a one-sided presentation of the case. The plaintiff attempts to state his case in his pleading. The defendant does a similar thing in his. If the pleadings are good, one should almost be able to become prejudiced in favor of one party by reading only the pleadings of that party.

Argument apparently should employ reason, and presumably appeal to reason. It should be founded on sound logical reason. The most, however, that one may regularly expect is an outward appearance of reason. For the characteristics of reason one may refer to a later chapter of this volume where reason is discussed in detail.¹⁵

Argument technically includes not only the consideration of one set of facts, but it requires the weighing of facts one against the other. It is a balancing of effects to determine the greater weight. All cases have this situation existing partially. Both the plaintiff and defendant have an equal opportunity to introduce evidence. If the judge and jury are unprejudiced, and if they have any desire to approximate justice, they must correlate the evidence of both parties. It is difficult to determine how much of this is actually done. Much of the argument seems to be but a one-sided consideration of facts favorable to the side in question. The results of argument are, however, the same whether the reasoning is valid or false.

It is not always possible to tell as to when argument will be more effective, or when suggestion will be more effective.

¹⁵ Chapter VII.

We may, however, lay down certain rules as to when argument seems preferable, and as to when suggestion seems preferable.

Argument seems preferable:

1. In exploiting or setting forth something new,¹⁶ as, for instance, a new theory of law;
2. In securing relatively important acts,¹⁶ about which people are accustomed to think and reason;
3. In exploiting anything having unusual talking points;¹⁶
4. In appealing to a judge or other professional person who is accustomed to be guided by reason;
5. When flattery is desired,¹⁶ as people like to feel that they are guided by reason;
6. When people are to understand abstract or impersonal facts, without having the facts translated into concrete and personal phases.
7. To cover and clothe suggestion; and
8. When the facts and their logical connection are clear.

Suggestion seems preferable:

1. When there is inadequate time for argument;¹⁷
2. For securing immediate action,¹⁷ as at the close of the argument when the jury is about to retire;
3. In supplementing argument;
4. When reason is futile, such as might be the case with insufficient facts, circumstantial evidence, jumbled facts, unintelligible facts, contradictory facts or ignorant jurors; and

¹⁶ Walter Dill Scott, *Influencing Men in Business*, 2nd Ed., pp. 87-97.

¹⁷ Walter Dill Scott, *Influencing Men in Business*, 2nd Ed., pp. 101-112.

5. For the carrying out of an habitual impulse to do, to feel, to understand, or to accept something desired to be done, felt, understood or accepted. In this case suggestion merely furnishes an excuse for a person to act as he wishes to act.

CHAPTER III

THE JUDGE AND THE JURY

The right selection of the judge and the jury is a difficult task requiring the use of a considerable amount of knowledge and ability. Not all judges and not all possible jurors are equally desirable for every case. Some are better than others in a particular case. Some will not do at all. The problem is to learn how to select the best ones for each case. The solution is rendered difficult due to the fact that many mental factors enter into the situation and complicate it. Just as in other walks of life so in the courtroom we find the wide gamut of personalities caused by the differences in heredity and environment. These we must investigate in their more important aspects, if we would attempt to attain a scientific answer to our inquiry. Neither psychology nor any other science has catalogued completely the variations in human nature. Psychology has, however, pointed out certain aspects of human nature which experience and investigation have shown to be desirable and undesirable characteristics in a judge or juror.

The work of selecting the judge and the jury is not only a difficult task, but a very important one as well. In fact it is one of the most vital things which a lawyer is called upon to do during the progress of a case. So much depends on the qualifications of the judge and the jury that each

step in their selection should receive careful scrutiny. In the final analysis they are the ones who make or break the case. A prominent lawyer once told me that in a close case he could always tell whether he was going to win or lose by knowing the men who were in the jury box. Probably he exaggerated considerably, yet there was a bit of truth in his statement. He could predict the outcome with some success if he knew the problems of human nature which were involved. He could tell where he would be handicapped, where helped, and where his opponent would be handicapped or helped by the blind prejudices of the jurors.

The importance of a wise selection of the judge and the jury must be realized when we consider that they are the ones who listen to our appeal. They are the ones for whom the appeal was created, to whom the appeal is addressed, and from whom conviction is desired as a result of its influence. If they are not capable of attentively listening to and understanding our appeal we have not made a wise choice. Suppose, for the purposes of illustration, that we present our appeal by means of valid and logical arguments while our opponent uses arguments pregnant with fallacies. Which side will win, if the judge and jury are not capable of distinguishing between true and false arguments? The question is difficult to answer. Each side has an equal opportunity to win although one is supported by facts while the other rests on fiction. It is then quite important that we choose a judge and jury who can distinguish between valid and false reasoning. Again suppose that our appeal is founded upon an instinct which in some people has received greater modification than in others. Our appeal, let us say, is strongest when presented to those who possess

the instinct in its unmodified form. Would we not then be wise if we could fill the jury box and the bench with men in whom that instinct has not been modified?

A peculiar problem in the selection of a jury is found in the southwestern states where about half of the population is composed of Spanish-Americans, many of whom are incapable of speaking or understanding the English language. These people are citizens of their respective states, are American citizens and hence are legally competent for the jury box. Many lawyers state that they make excellent jurors in some cases although everything must be translated for them by an interpreter. Failure to understand English does not constitute a sufficient cause to enable them to be excused on that account. Consequently the panels are frequently composed of one-third, or one-half or even two-thirds of Spanish-Americans for many of whom every word must be translated. It would seem certain that such a condition must present some peculiar problems. In what cases is it desirable to have a jury who does not think in English? In what cases is it desirable to have a jury who judges by a different standard? Are these Spanish-Americans less or more impressionable than their English speaking co-citizens? The object of the case furnishes one of the possible solutions to these questions. If the object of the case is not recognized by their standards as a desirable end to serve, then they would not be good jurors for the case. If the appeal of the case is founded on a wish or a want which they do not have, then they would make undesirable jurors. If the appeal is presented by suggestion rather than by argument, it would seem that they

might be capable jurors, because suggestions are mental processes not depending to a great extent on words. If the appeal is to arguments founded on English-worded thoughts, it would seem that persons who could not understand English could not possibly interpret or understand the true meanings involved.

Let us again return to the normal problem of selecting the judge and the jury. Ordinarily there is no such race problem involved as that found in the southwestern states. Usually all of the possible jurors can speak and understand the English language to a fair degree of accuracy. Then the problem of selecting the ones most susceptible to the appeal is confined to a choice among members of the same race.

The only object, of course, in permitting any selection at all among judges and jurors is to give each counsel an opportunity to avoid unfair influences and thereby secure an impartial hearing. This opening gives counsel not only an opportunity to avoid harmful prejudices, but it permits counsel a chance to seek favorable prejudices. Under present rules of practice it seems legally ethical to try to obtain a judge and jury who will be most susceptible to one's own appeal, and least susceptible to the opposition's appeal.¹ The only time when such procedure becomes unprofessional is when it is accomplished by unfair means.

As the qualifications of a good judge and jury are susceptibility to our appeal and lack of susceptibility to our

¹ A similar statement is made by John C. Reed, *Conduct of Law Suits*, 2nd Ed., p. 232.

opponent's appeal, we must first call to mind the exact appeals. What is our own appeal and by what means are we going to present it? What is our opponent's appeal and by what means do we think he will present it? These are the first questions we must answer before we select a judge or jury. We have already learned what our own appeal is, and we should have already decided the best means by which it can be presented. By the nature of the case and by an examination of the pleadings, we should be able to tell the nature of our opponent's appeal. As to how he will present it, we may have to judge from experiences with him in the past, or we may have to give him the benefit of the doubt and presume that he will present it by the better means of the two alternatives, suggestion or argument.

When we have concretely pictured in our mind our own and our opponent's appeals, we can then begin to look for individuals for the bench and jury box who possess natures which do not ab initio make our appeal secondary in inherent force to that of our opponents. At least we must be careful to prevent an agreement between our opponent's appeal and the prejudiced natures of the judge and jury. The acquisition of this information requires some investigation and careful observation of all available knowledge about the individuals in question. If our knowledge of the possible judges and jurors is extremely limited, we may not be able to tell whether their characteristics are harmonious with our appeal, or whether they are harmonious with the appeal of our opponent. We may thus allow a person to sit on the bench or in the jury box who at the outset is prejudiced against us, and who thereby jeopardizes our chance of winning, or who makes our task more difficult. There is

no alternative. We must know as much as possible about each possible judge and juror.

A statement is now going to be made with which some may disagree upon first reading. This statement is that no normal adult person is unprejudiced as to anything. By this we mean that every normal adult is prejudiced either for or against everything, or has latent prejudices in the form of mental associations which will create patent prejudices at the first available opportunity. If the thing is connected with past experience it is associated with and flavored by the feeling or opinion which was co-existent with it at that time. James² says, "When two elementary brain-processes have been active together or in immediate succession, one of them, on re-occurring, tends to propagate its excitement into the other." Thus associations tend to recall one another. The recurrence of one tends to call the other to consciousness. If the thing is new and novel then instinctively there is some prejudice in the shape of question, fear, or distrust,³ and it will take a large amount of evidence to overcome this inertia to the new idea. If the thing is old, but had not been directly connected with past experience, it probably will become associated in the mind with some comparable sensation or feeling immediately upon happening and be tainted by that present sensation or feeling. Thus no thing, whether previously experienced or not, whether new or old, can create an impression unprejudiced by associations which already

² William James, *Psychology*, 37, 127, 253; John C. Reed, *Conduct of Law Suits*, 2nd Ed., pp. Briefer Course, p. 256.

³ I. Edman, *Human Traits*, pp. 112-113.

exist in the mind. In the light of such facts it is humorous to hear a prospective juror say in examination that he has formed no opinions as to the merits of the case, that he can sit as a fair and impartial juror, and that he can render a verdict according to the law and the evidence as they are presented to him. This is impossible. His inherent, though possibly unknown prejudices make such impartiality impossible.

We have spoken of a choice of judges. Some may wonder as to how we expect to have a choice. In some localities there are several judges in the same court. Thus in Cincinnati, for illustration, in the common pleas or county court there are some six judges. This gives a considerable range of possible selections. There is, however, a still wider range of possibilities in Cincinnati for there is a city court, called the Superior Court, composed of three judges. This latter court has concurrent jurisdiction with the aforementioned county court within the limits of Cincinnati as to civil matters. A wide range of judges is thus possible for a civil suit in the city of Cincinnati. A similar situation exists in all large cities and in some of the smaller ones as well.

Furthermore, in cases of obvious prejudice the judge himself will often refuse to hear the case and will ask a judge from another jurisdiction, if necessary, to sit in the case. A change of venue sometimes is possible. Usually such a change removes the case from a known hostile surrounding where a fair trial is impossible to a locality where the prejudices are unknown.

Before, however, we make any definite choice of one judge we must learn as much as possible about him so that

we will know how the appeals will affect him. Quite frequently it is common knowledge among members of the bar that a judge is prejudiced in a certain direction. Thus it is said that before one judge it is impossible to have a will set aside for any cause. Another judge may lean toward labor or capital in the struggle for economic leadership. Still another judge may be strictly opposed to the theory of capital punishment. Where such outstanding positions exist they must be carefully considered, and avoided if they conflict with the appeal of our case.

Through training and through position most judges are conservative. Their work requires them to be so. They must depend more on the reasoning of valid arguments than upon unreasoned motives. This fact has a great deal to do with the nature of the appeal. Judges always like to feel that they have been convinced by the appeal of argument, though in reality many decisions are not founded on valid reasoning as is evidenced by the number of decisions which are reversed by higher courts. Judges, even though occupying the position of impartial dispensers of justice, are but human beings. They are subject to the same instincts and emotions as are other men, although possibly to better controlled and modified ones.

Being rather prominent in their respective localities, judges usually can not conceal many of their leanings and prejudices. Election propaganda often brings forth many enlightening facts. Fraternal orders, age, health, religion, sports and friends are some of the factors which enter into the mental makeup of a judge and vary the justice of his decisions.

Important as it is to select the right judge, it is still more

important to have the right jurors. An unfavorable judge is usually not half so bad as an unfavorable jury, for a judge, even though prejudiced, may be able to overcome his personal feelings and render a judgment according to justice. He depends more on reason than does the jury, as has already been stated. The jurors depend less on reason, and are certainly less well versed in it than is the average judge. They are more susceptible to suggestion. The following illustration is told of a case in point. It was a suit involving a promissory note. The plaintiff had made out a particularly strong case, and feeling that the facts were clear, had waived argument. Defendant's counsel, however, spoke at length. The verdict was for the defendant. After the trial the plaintiff inquired of one of the jurors as to why the verdict was for the defendant. "Why, you gave up, didn't you?" was the reply. It seems that the waiving of argument by the plaintiff had suggested to the jury that his case was without foundation. They had not reasoned at all about the facts.

Reed⁴ gives a number of excellent illustrations showing the value of a wise choice of jurors. We will quote one of them:

"A young man was charged with assault with intent to murder. The prosecutor had been the tenant of his father and when the former was vacating, the son discovered that he was maliciously defacing the walls of one of the rooms. High words ensued, and then a fight. The prosecutor attacking with a heavy club was disabled by a well-aimed

⁴ John C. Reed, *Conduct of Law Suits*, 2nd Ed., pp. 228-232.

pistol shot. All of the eyewitnesses were related to the prosecutor, and their testimony was expected to be very hostile to the defendant. His counsel had but a moment to study the panel, but he so managed his challenges that there were eleven landlords on the jury. According to the theory of the State the defendant was clearly guilty; but the witnesses, having been ordered out of court, contradicted one another, and the defacement mentioned was shown by his admissions to have been the act of the tenant, although he had denied it on the stand. The predominant class upon the jury turned the scales in this doubtful case, and the defendant was acquitted. It was ascertained after the trial that the sons of several of the jury had had quarrels with their tenants for injuries done to the premises during their tenancies."

Greater difficulty is usually experienced in selecting a jury than in selecting a judge. A larger number of individuals are involved, and less is known *ab initio* regarding them. There is one compensating advantage, however, in the fact that their qualifications for jury duty may be examined in open court by a series of pertinent questions. The information thus elicited is, in many cases, all that is necessary to properly judge their qualifications. It sometimes happens, however, that counsel is constrained through policy from asking a prospective juror as to vital matters. Thus prejudices as to religion, although important, may be passed by because of its delicate nature. Religion is not always a permissible subject upon which to examine, and infrequently does it furnish the basis for the removal of a juror for cause. Jurors are sometimes not examined as to pertinent matters because counsel does not wish to display

to opposing counsel the influences which he is trying to avoid. The examination is rather indirect and brief, an attempt being made to bring out the desired information by obiter dictum responses rather than by direct responses.

In selecting a jury it pays well to observe carefully the action of opposing counsel as he is bound to expose his hand to some extent, but be very cautious about accepting as true what you see or hear as he is using his mental powers to select the best jury for his own case, and if through subterfuge he can make us believe that a juror is favorable to our side when in reality he is favorable to his side, he can not be blamed for doing so. In the accomplishment of this purpose he may examine the prospective jurors only as to incidental matters in which the juror is antagonistic to him. The important matters being favorable to him will not be mentioned in the examination. This condition should always create suspicion.

Another trick-of-the-trade is used by counsel to conserve a challenge in the case of a juror who is disagreeable to both sides. Opposing counsel will, by examination, show the prospective juror to be so hostile to our side that we will have to use one of our challenges while the opposition conserves its challenges.

Let us for a moment consider the psychological effect of peremptory challenges and challenges for cause. What is the proper place for each? The challenge for cause conceals nothing, while the peremptory challenge conceals the reason for dismissal. The two effects which must be considered are the effects on the remaining jurors and the effect on opposite counsel. It seems that there never should be any ill effect on the remaining jurors because one of

their number was excused for a substantial and fair cause. Of course if the jury is composed of professional jurors, as is sometimes the case in large cities, the excusal of one of their number for cause may create some antagonism in the remaining ones. It is, however, very difficult to excuse a professional juror for cause, as they are very clever in examination and make a particular effort to show no prejudice or intelligence either, because it is their "bread-and-butter" to sit on juries. Such jurors should all be excused whenever possible by any available means. The main advantage of a challenge for cause is that the number is usually as many as there are causes.

The advantage of a peremptory challenge is that it conceals the reason for dismissal. It is impossible to say what effect this has in ordinary cases upon those remaining in the jury box. Possibly it does no harm at all if the manner of counsel is pleasant. Upon opposite counsel the peremptory challenge creates the effect of uncertainty. He does not know why the juror was excused and feels that inasmuch as the juror was not removed for cause there must be some fact which is being concealed from him. Thus peremptory challenges are sometimes valuable to create a bad psychological effect on the opposition, even though there is nothing to conceal.

Counsel will always be on the alert to watch for prejudices which would be harmful to his appeal or which would help the opposite appeal. Each case has its own particular prejudices to avoid. Some of the more common prejudices are those of friendship, relationship, employment, fraternity, economic, occupation, sex and age. Where these exist they must prohibit the man from sitting on the jury.

In closing this chapter let us call to mind that the judge and jury are the ones who decide as to who shall win the case. These men are influenced by motives founded on instincts, their corresponding emotions and reason, or a combination of all. Therefore, in selecting the judge and jury let us choose men, the development of whose instincts, emotions and reasoning ability will not handicap our case. Instincts are present in all.² The only way we can tell anything about their development or modification in a specific individual is by the information we may have regarding the details of that individual's life. As to emotions we can tell a little more in the courtroom. Young people are more emotional than elderly ones, and women are more emotional than men.⁵ We may also be able to tell something of a juror's emotional characteristics by the way he reacts to the questions of examination. When we depend largely on reason we will do well to get as intelligent and well educated people as possible, because usually the more intelligent and the better educated a person is, the better he can reason.

This completes our analysis of the mental factors involved in selecting the judge and jury. Counsel will realize that too much care can not be expended in selecting the judge and jury, as they are the ones to whom the appeal of the case is directed, and upon whose decision victory or defeat depends.

⁵ I. Edman, *Human Traits*, p. 194.

CHAPTER IV

EVIDENCE

Evidence is the legal means by which a disputed fact is proved or disproved in a court of law. Where issues of fact have been joined between opposing parties, evidence is necessary in order to furnish the basis for a decision. Without evidence no case can be won, except possibly by a default of the opposite party. Even then we may say that the undisputed pleadings constitute the required proof by furnishing the scintilla of evidence upon which the case is decided.

The legal purpose of evidence is to allow each side an equal opportunity to introduce facts favorable to its own contentions, and unfavorable to those of its opponents. The law is appeased as to the justice of the situation when this opportunity is made available.

We are, however, interested in a different aspect of evidence. We are not satisfied with the mere introduction of relevant facts. We are concerned with the effect which these facts produce upon the minds which hear them. We are not concerned merely with production of stimuli, but we require that those stimuli produce the proper response.

The psychological purpose of evidence is to induce belief into the minds of the judge and the jury. Unless this is accomplished, evidence is a failure, no matter how nice the

evidence may be from any other standpoint. Where evidence is involved, psychology assumes the pragmatic viewpoint. Thus the psychology of evidence believes that the sole test of success and truth is the degree to which conviction is established in the minds of the judge and jury.

Evidence is one of the legal mechanisms or conveniences for presenting the psychological appeal. Whether secured from the personal testimony of a witness, from a deposition, or from other means, it is the carrier of proof by which minds are influenced to form definite opinions as to the truth or falsity of the controverted questions.

The principles of psychology are of great value to the lawyer when applied to legal evidence. In no other field of law has applied psychology made such strides. Munsterberg¹ wrote an entire volume on the subject. Arnold² wrote a rather critical, somewhat derogatory, and yet on the whole interesting and enlightening book on evidence and associated subjects. The witness has been subjected to considerable study and investigation. How accurate is his testimony even when he tries to tell the whole truth? How can we tell when he is committing perjury? How may direct and cross-examination be best conducted to attain the desired result? What is the value of the expert witness? Why have a separation of witnesses? Why is the personal testimony of a witness more effective than that of a deposition? Why is a witness permitted to give hearsay evidence only as to certain matters? These are some of the many questions which psychology attempts to

¹ Hugo Munsterberg, On the Witness Stand.

² G. F. Arnold, Psychology Ap-

plied to Legal Evidence and other Constructions of Law, 2nd Ed. (English).



Laboratory tests show that evidence is inaccurate even when the witness pays careful attention with the object of testifying later.

answer in a scientific manner. The answer to each question will occupy a separate division in this chapter.

1. The Ability of the Witness.

We shall first consider those factors which go to make up the native ability of the witness to testify, and which place limits on the extent and accuracy of the testimony. At this time we are assuming that the witness is intending to testify accurately, and is making no volitional effort to falsify.

Even where there is perfect willingness and desire on the part of the witness to testify to the truth, the whole truth, and nothing but the truth, it is usually impossible to do so.³ Accurate testimony is the exception and not the general rule. Swift⁴ reports an interesting experiment performed by a German named Stern with the Aussage test. The subjects were a number of university professors and students. They were first warned that the experiment was to be a test of the powers of observation and that they would be required to write what they remembered. Consequently the attention was very keen, and great care was exercised to avoid inaccuracies. The subjects were permitted to examine a picture for forty-five seconds. Immediately thereafter they were asked to write all they remembered about the picture. The same process of recording memory was repeated at the end of five, fourteen, and thirty-one days. Although the experiment was performed under

³ For an interesting discussion of the psychology of testimony and an experiment as to unreliability of testimony see Coleman R. Griffith, *General Introduction to Psychology*, pp. 407-416.

⁴ E. J. Swift, *Psychology and the Day's Work*.

ideally controlled conditions by subjects of high intelligence, the errors were nearly six per cent. in the records which were made immediately after the observation, while the errors were nearly ten per cent. in the balance of the records. If under such conditions as those under which this experiment was performed so many errors were made, what percentage of errors may we expect in the testimony of persons who give little attention to the matter in question, who make no effort to remember, who may not be of so high an intelligence, and who may not have the ability to express in words what they did observe? The percentage must be very high. Other experiments of a similar nature have shown that the uneducated make from two to three times as many errors as the educated.

Whipple⁵ summarizes the experiment on fidelity, part of which we will quote here.

"The chief single result of the Aussage psychology is that an errorless report is not the rule, but the exception, even when the report is made by a competent S under favorable conditions. Thus in 240 reports, Miss Borst found only 2 per cent. errorless narratives and 0.5 per cent. errorless depositions.

"The average S, when no suggestive questions are employed, exhibits a coefficient of accuracy of approximately 75 per cent.

"Generally speaking, attestation does not guarantee accuracy; on the contrary, though the number of errors is nearly twice as great in unsworn as in sworn testimony

⁵ Whipple, *Manual of Mental and Physical Tests*, Vol. II, pp. 31-40.

(according to Stern, 1.82 times, according to Borst, 1.89 times as great), there still remains as high as 10 per cent. error in sworn testimony.

"In all of Stern's work, both in narratives and depositions, with pictures, or events, or estimations of times and distances, whether under oath or not, the reports of men have been more accurate (by from 20 to 33 per cent.), though less extended, than those of women, and a similar sex-difference has appeared in some tests of school children.

"Most experimenters conclude that the reports of children are in every way inferior to those of adults, that their range is smaller, their inaccuracy greater, and their warranted assurance and reliability of assurance much lower because their assurance is too great.

"There is no conclusive evidence upon the relation between good report and general intelligence.

"That intelligence may, however, play a positive role is suggested by the conclusions of Breukink that physicians, professors and teachers give more extended and more accurate reports than nurses and laboring men, and that the cultured group is much less open to suggestion than the uncultured and much less liable to take oath to their answers to suggestive questions.

"The reports of defectives, paralytics, epileptics, the insane, etc., show, as one might expect, a very high degree of inaccuracy, even when the pathological condition is not seriously developed.

"Lengthening the interval between experience and report tends, on the whole, to reduce range and accuracy.

"All authorities agree that the use of the interrogatory,

whether of the complete or incomplete form, increases the range and decreases the accuracy of the report.

"The introduction of leading or suggestive questions decidedly decreases the accuracy of report in children and may affect seriously the testimony of uncultured adults unless the conditions are favorable.

"Stern finds four kinds of errors in the narrative: (a) errors of apprehension (observation), like overlooking, misapprehending, underestimating, overestimating, etc.; (b) real errors of memory, like forgetting, filling in of gaps, gradual amplification, etc.; (c) errors of imagination, 're-touching' the recollection, unintentional blending of imagined experiences with the one reported, or the harmless 'playing' with the report often seen in children, and (d) errors of judgment (will), like lack of caution or self-criticism."

The ability to be a good witness depends first upon a physiological basis. Mental functions are so connected with, and dependent upon the material body that they can not operate normally if the physique is deficient.

We are not concerned here with the superiority of mind or matter. We may safely assume, for our purposes, that the mind depends on the action of the brain. Whether the mind is the cause or the result of brain action we care not, because we do know from endless experience and experimentation that destruction of the brain or impairment thereof causes a corresponding affectation of the mind to all visible extents. The main parts of the body upon which the brain depends are the various sense organs, as the eyes, the ears, the nose, the mouth and the skin, for they are the receiving apparatus for the brain, and all acts and

conscious processes are initiated by stimulation of the senses. If these are abnormal in any respect, whether through injury or disease, the mind can not function naturally and normally. It can not receive a normal impulse from the affected sense organ, nor can it transmit a normal impulse to an affected organ. The brain can not function normally if there is a mental or nervous derangement. These physical weaknesses handicap a witness, and frequently lessen his ability to give accurate and complete testimony. A lawyer can not be too careful in observing the physical limits of the witness. This can often be determined fairly accurately by mere observation, yet when there is any question it should be done, if possible, before the trial and in private. The character of the testimony depends upon the mental ability of the witness to observe, to comprehend, to remember and to express facts.⁶ If any one of the factors is influenced in a detrimental way by a physical force, the evidence is inaccurate except for the possibility of accuracy by chance.

Even where no actual physical abnormality exists there are frequently variations in the senses which cause differences in the ability to testify.

"It is a matter of common knowledge that persons vary greatly in the sensitiveness of their sense perceptions. This general field of variability in sensitiveness has been carefully studied and several kinds of interesting facts have been discovered, which are not ordinarily recognized. In the case of vision, for example, it is perfectly well under-

⁶ See Coleman R. Griffith, *General Introduction to Psychology*, p. 407; Hollingworth & Poffen-berger, *Applied Psychology*, pp. 252-254; Hans Gross, *Criminal Psychology*, pp. 187-300.

stood that persons vary in the distinctness and clearness with which they see, and these differences are most often referred to the relative perfection of the refractive mechanism of the eye. That a similar difference in the capacity to distinguish colors from one another is equally common, is not generally appreciated. Color blindness, to be sure, as a pathological fact is well known; but it is not widely understood that between normal vision for colors and pathological color blindness there are numerous stages of defect which render persons insensitive to many niceties of hue and shade. In the case of hearing, again, everybody knows that elderly people are less acute than children, and the wide variation in the keenness of hearing of different individuals is perfectly familiar. It is not usually recognized that a similar distinction marks the capacity of different people to distinguish notes of different pitch and tone quality. Nevertheless, this is the fact, and not a few of the so called 'unmusical persons' are unmusical primarily because they can not thus distinguish with certainty normal musical intervals."⁷

These variations in sensitiveness of the senses must be observed carefully by the lawyer to see that they do not interfere with the ability of the witness to testify. It is very easy to imagine cases in which such conditions might apply. Suppose, for instance, that the case was one of damages against a railroad for personal injuries sustained. Suppose it was claimed that a locomotive of the defendant did not whistle as it approached a crossing. Would a wit-

⁷ J. R. Angell, Chapters from
Modern Psychology, pp. 156-158.

ness be of much value who could scarcely hear? Suppose the case rests upon the fact as to whether a red or green light was displayed. Would a witness be of much value who could not tell the difference between the colors of red and green? It might be very embarrassing, and disastrous as well, to rely on a color blind witness to distinguish between colors. Imagine how it would feel to have the fact of color blindness disclosed by an opponent in cross-examination. Only one surprise of this nature would be necessary to create a perpetual attentiveness to the physical qualifications of a witness.⁸

Let us now assume that the witness has the necessary physical qualifications for a good witness. What mental qualifications does he need? There are three which stand out prominently. They are the powers of perception, memory, and expression.

The first of these is perception, under which is included observation and comprehension. When a stimulus is presented to the senses and we are merely aware of it without understanding it, we do not have perception, we have only sensation. But if that mere awareness be dissipated by delineation and comprehension and recognition, we have perception. Perception is the process by which facts are realized by the mind. Only as facts are perceived are they imprinted, as it were, upon the mind, so that there they may be remembered and reproduced.

Quite obviously then, the power of accurate and com-

⁸ The lawyer who is interested in a further investigation of the nature and characteristics of the senses is referred to the biblio-

graphy at the end of this book. Practically all of the books there listed have chapters upon this subject.

plete perception of the facts which it may be desired to bring into evidence, is of primary importance. Unless there is proper perception the desired facts may never have been realized at all by the witness or they may have been erroneously realized so that the evidence is distorted.

The main problems of a lawyer with regard to the perception of a witness concern the relative part which perception plays in the reliability of evidence, the conditions under which accurate and complete perception is possible, the conditions under which accurate and complete perception is not likely, and the illusions of false perceptions.

One of the necessary factors for accurate and complete perception is attention. There must be some attention or there can be no observation or perception. Accurate attention is beyond the power of most people. There will be a dozen witnesses to the same situation, and no two will agree on all essential particulars. Even where there is no direct conflict, the reports are likely to be incomplete. One person will attend to the situation from one angle, while another will attend from a different angle.

In Part III the subject of attention is gone into quite thoroughly. Here we will consider only those phases of it which satisfy our need at this point.

Attention is the giving heed to some impression which is besieging the consciousness for recognition, and the consequent disregarding of other impressions. Nearly all the time the various senses are starting impulses on the nerve paths leading to the brain, but not all of the impulses are attended. Many must be disregarded. Those that are heeded are said to receive attention. Attention is thus a

preliminary act of adjustment on the part of the mind. It is a channel through which perception may take place and without which perception can not take place.

Attention is at best a very unstable thing. It moves very rapidly from one place to another. It is not always as accurate one time as another. For illustration, the observation upon which most of the evidence is based is the result of very casual attention. Seldom is it that there is any knowledge at the time the situation is witnessed that the person will be called upon at a later date, possibly months or years later, to testify in a court of law, under oath, as to what happened. Witnesses, therefore, usually make no attempt to attend carefully until they hear that a suit has been commenced, or until they receive a subpoena as a witness.

If you would measure the amount of attention which a witness gave to a certain situation consider the following:

1. How intense was the stimulus? The greater the force the more likely it is that there was accurate attention.
2. What was the extensity of the stimulus? Was it one of sight, or sound, or taste, or smell, or was it combined? The greater the extensity the greater the attention, other factors being equal.
3. How long did the stimulus endure? The longer a stimulus endures the more likely it is to receive attention, provided it has not continued long enough to produce monotony.
4. How many times was the stimulus repeated? The more times a stimulus is repeated the more likely it is to receive attention.

5. Was there any actual movement? A moving automobile usually receives more attention than one parked on the side of the road.
6. How many other stimuli were also besieging the mind for recognition at the time? A one-ring circus receives all of the attention while a three-ring circus divides it.
7. Does the stimulus contrast with others? If it does vividly it is more likely to receive attention.
8. What interest has the witness in the stimulus? This is the most important question. The greater the interest, whether it be actual interest or only momentary curiosity, the greater the chance for securing and holding attention.

First, then, perception of a witness depends upon the attention which the witness gives the stimuli which he receives from the situation.

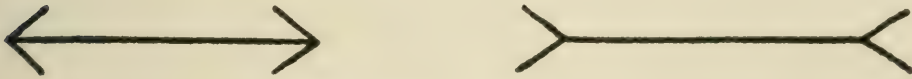
In addition to attention, Starch⁹ says that the range of observation (or perception) probably depends on the quickness of assimilation of items, retentiveness and previous knowledge about the facts to be observed.

We will consider the second factor upon which the accuracy and completeness of perception depends, upon the previously acquired experiences which are now associated or connected with the experiences at hand in order to give it the meaning and definition of a perception.

It does little good for a witness to attend to a situation unless he has already suffered such previous experiences as

⁹ Daniel Starch, Educational Psychology, p. 134.

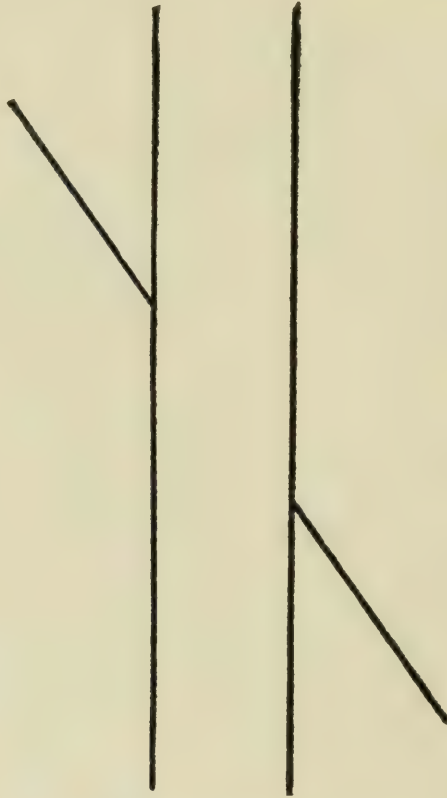
will furnish associated facts by which he can understand and comprehend the present situation. In other words, he must be well enough educated to know what it is all about. Without these associations the witness can not understand what is taking place, can not remember it, and certainly can not make a report of what occurred. To take an extreme situation, for example, suppose two foreigners were engaged in a street fight. The average witness might be satisfactory to report upon the blows struck, but when it comes to language, he might be incapacitated due to lack of comprehension of the words used, or in other words, to lack of previously acquired meanings with which the words might be associated.



The Muller-Lyer Illusion

The ability to furnish associations (assuming the proper physical basis) is dependent upon the intelligence and education of the witness. Intelligence is the native capacity of a person to receive education. If a person is not intelligent he can not become educated. The world war created a considerable interest in intelligence tests. Two tests, namely the Army Alpha and the Army Beta, were devised and tested expressly for the use of the army in testing the military personnel. These are group tests and are valuable only for classifying intelligence into rough groups. Individual tests, such as the Binet-Simon and the Thorndike, determine far more accurately the intelligence of a single

person. Intelligence, at best, is a difficult thing to determine. Looks have been proved to be no criterion at all. At the present time it is impossible to give any intelligence test to a witness. It is difficult to predict, but the writer feels certain that the not far distant future will see a

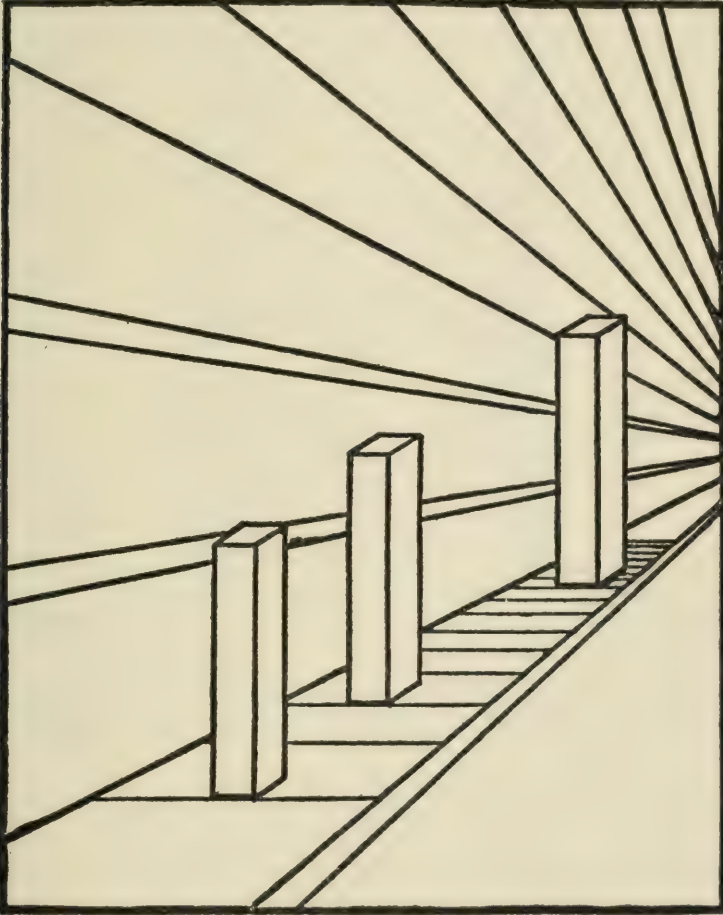


The Poggendorf Illusion

greater use of intelligence tests in ordinary court procedure. In the matter of education, considerable may be learned as to the witness. Grammar, choice of words, hesitancy, embarrassment, tone, poise, attitude and other features are guides to educational qualifications. The expert witness is a super-educated person in his particular

line. The qualifying examination required of such a witness is to satisfy the court that the witness has the educational requisites to make him a witness.

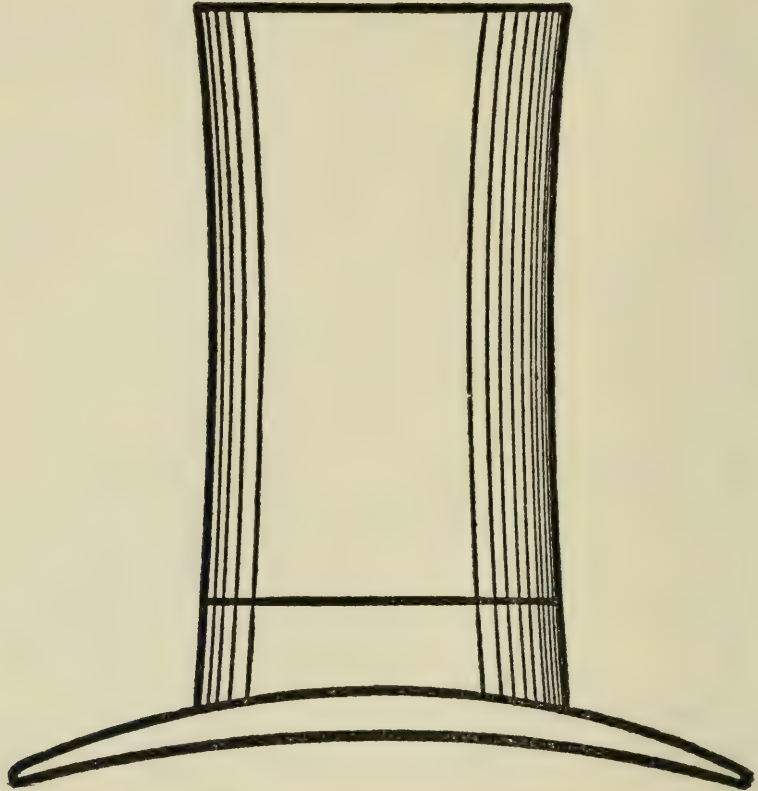
The lawyer, thus, who would consider the reliability of the evidence of a witness, must first consider the ability of



A striking illusion of perspective

the witness to perceive the facts, first as regards attention and second as regards the manner in which the facts were connected in the mind of the witness.

The chief reasons for inaccuracies of perception as given by Starch,¹⁰ are (1) insufficient attention, (2) meagerness



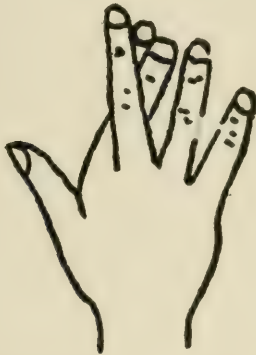
The vertical dimension is equal to the horizontal one, but the former appears greater. As found in Readings in General Psychology, p. 275.

of ideas and experiences for use in association, (3) low retentiveness so that other impressions can easily distort them, (4) faint imagery in terms of which to picture the objects, (5) lack of conscientiousness in keeping apart the parts observed and those which are only inferred, and (6)

¹⁰ Daniel Starch, Educational Psychology, p. 134.

the effect of suggestion through which other ideas may be fitted into the story./

When errors of perception are large or vivid they are called illusions. It is thus very difficult to perceive as to whether a sound comes from directly in front of one or directly behind one if noise be the only determining sensation. The illusions of vision are many. A pane of window glass may give a very inaccurate perception. Anyone who stands on the level mesa for the first time and looks at



Aristotle's Illusion

mountains ten miles away has an illusion because the mountains seem so close. Every lawyer can add illusions from his own experience. They are quite frequent and must be observed by all means when a witness gives them as fact.

We will now pass from the subject of perception to that of memory. The lawyer who has a problem in perception will find many sources of information.¹¹

¹¹ Some of the sources of information concerning perception are as follows: Arthur I. Gates, *Elementary Psychology*, pp. 373-408.

Gates considers inaccurate perceptions and illusions quite fully in addition to a general treatment. Harvey A. Carr, *Psychology*, pp.

Assuming that the witness gave proper attention to the facts as they happened and that he understood them fully at the time, he must also remember them until the time of trial, if he is to testify accurately. Memory is retention recollection.¹² It is a reinstatement of an old experience, or a present consciousness of an old experience, with the knowledge that it is old.¹³ If the witness can not remember and recall what he originally perceived then something has happened to his memory and he is not a good witness. Probably the largest number of errors in evidence are caused by faulty memory on the part of the witness. This faulty memory is easy to account for, because the testimony of witnesses in our courts is, with few exceptions, based upon mere incidental memory.¹⁴

Many people witness and perceive an accident. They make no effort to remember what happened, so that when they are called upon to testify later they have probably forgotten much of what they originally perceived.

Memory depends upon two main factors. First, memory depends on a physiological one. It has to do with the formation of brain paths or synapses, as they are called. The greater the plasticity of the brain in permitting the formation and retention of a synapse the greater the memory. This may be more clearly stated as follows:

110-135; W. B. Pillsbury, *Essentials of Psychology*, Rev. Ed., pp. 169-201; *Education as the Psychologist Sees It*, pp. 181-203; Daniel Starch, *Educational Psychology*, pp. 132-140; R. S. Woodworth, *Psychology*, pp. 419-460.

¹² William James, *Psychology*, Briefer Course, p. 289.

¹³ W. B. Pillsbury, *Essentials of Psychology*, Rev. Ed., p. 205.

¹⁴ Hollingworth & Poffenberger, *Applied Psychology*, p. 252.

Whenever a fact is perceived there are formed in the brain certain pathways, and the longer the plasticity of the brain allows these paths to remain, the longer and better the memory.

The second factor upon which memory depends is the degree to which the original facts were not only perceived but how, and how well they were impressed and fixed in the mind. In other words, how well were they learned. The better the learning the better the chance for longer and better remembrance.

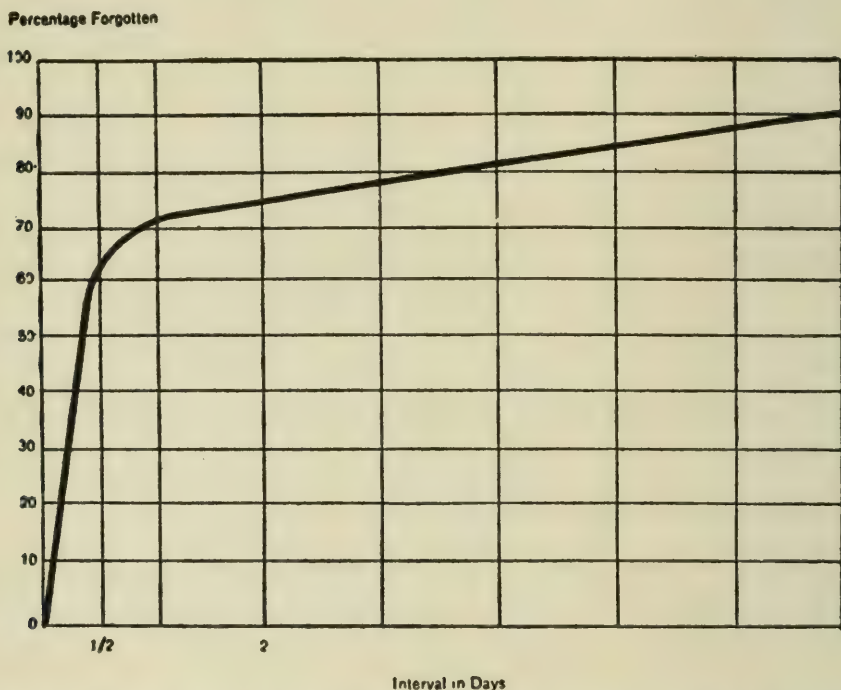
Suppose now that a witness had good perception of the original facts in question and has them properly fixed in memory, how does he recall them when he is interrogated on the witness stand? When we have committed something to memory, how do we get it back? Recall is the object of memory, and of course there can be no satisfactory memory unless it responds to facile recall. Recall is in reality but evidence of memory.

Pillsbury¹⁵ says that for the most part recall is altogether beyond our control. It is dependent upon the associations that were established at the moment of learning. If one has established a connection between a given stimulus or event and a bit of knowledge that would be desirable at the moment, one recalls and the situation is met. If the association has not been established, the knowledge, even if possessed, is not aroused and for the individual it is as if it had never been known. All that can be done to favor

¹⁵ W. B. Pillsbury, *Education as the Psychologist Sees It*, pp. 159-160.

recall is to learn each bit of knowledge in connection with the occasions on which it will be needed later.

When the witness is on the stand, the stimulus which he receives to aid his memory, is the question put by counsel. From the question there arises in the mind of the witness all those bits of knowledge which are connected or associated in his mind with the subject of the question.



Curve showing the rate at which forgetting occurs with the passage of time. (From Poffenberger, *Psychology in Advertising*.)

Thus, recall takes place, and the witness answers the question.

We shall say more of memory under Part III, where we will consider it from the introspective standpoint of the lawyer himself.

Aside from illusions and inaccurate perceptions, failure of memory is due to forgetting. Time is the essence of

memory. It is an important fact to remember. Forgetting is very rapid at first. Then it gradually tapers off at a slower rate.¹⁶ The greater the elapsed time between the observing of an event and the reporting upon it in a court of law the greater will be the unreliability of the testimony. The memory of everyone is subject to deterioration. A person who today was a witness to a railroad accident might remember the important details for some time, especially if there were vivid and startling consequences such as much suffering and the loss of life, but time, the fortunate healer of memory wounds, gradually smothers the details until finally all that would be remembered would be that an accident occurred in which some people were injured.

The rate of forgetting due to the passage of time is dependent upon the plasticity of the brain and the degree of fixation, as aforesaid.

Ordinary forgetting or normal weakness of memory is not, however, of so great an importance to the lawyer as are illusions of memory because the latter are so frequent and so subtle and hence so difficult to detect.

"Memory illusion, or paramnesia,"¹⁷ says Gross, "consists in the illusory opinion of having experienced, seen or heard something, although there has been no such experience, vision or sound. It is more important in criminal law because it enters unobtrusively, and unnoticed into the circle of observation, and not directly by means of a demonstrated mistake. Hence, it is the more difficult to discover

¹⁶ Arthur I. Gates, *Psychology for Students of Education*, p. 260. ¹⁷ Hans Gross, *Criminal Psychology*, p. 275.

and has a disturbing influence which makes it very hard to perceive the mistakes which have occurred in consequence of it."

Memory illusions have been divided into three classes:¹⁸ (1) false recollections to which there correspond no real events of personal history; (2) others which misrepresent the manner of the happening of the events; and (3) others which falsify the date of events remembered.

It is well recognized that a person may apparently remember facts and situations which never happened to the person at all. In such a case the facts have been supplied by the imagination or by suggestion.

Much has been said regarding suggestion in the chapter on presenting the appeal. Further attention must be called to it here, as it plays many peculiar tricks with the memory. Suggestion not only creates artificial memory out of nothing, but it changes existing memories to suit its own ends. It is one of the principal causes of inaccurate testimony. Newspapers are very suggestive. That is one reason why witnesses should always be asked as to whether they have been reading accounts of the event about which they are asked to testify. It is safe to conclude that the memory of the witness will be tainted with suggestive influences if he has been reading the papers which have been "playing up" the event in a prominent manner. This evidence can not be uncritically accepted at its face value. Lawyers themselves may exert a suggestive influence on prospective

¹⁸ G. F. Arnold, Psychology Applied to Legal Evidence, 2nd Ed., p. 198.

witnesses.¹⁹ Many are the witnesses whose memory has been bolstered by the suggestions of counsel. A friendly witness is one of the most fertile fields for sowing the seeds of suggestion. Such memory is always difficult to label.

It is not particularly difficult, if one be inclined that way, to take a child and so suggestively fix him that he will testify as to facts which he says were remembered but which were implanted in his memory by suggestion.

Memory may be disturbed by constant talking about the facts which are remembered. Each time the event is discussed the exact truth is varied slightly. After much talk the event may lose all resemblance to its original form. No better illustration can be found of this weakness than in the way rumor travels from lip to lip starting from some small insignificant fact, and ending, sometimes humorously and sometimes tragically, in a mountain of scandal. Memory of an event which was not observed may even be created by constant talking about the event. The following quotation from Titchener²⁰ is highly interesting.

“Words often repeated are in this way highly deceptive; and there is good psychology in the story of the traveller who told his romantic tales so often that he finally believed them himself. Many of us, if we would but confess it, remember things that happened before we were born; the account of them was impressed on us in childhood, and was later bodied forth in images; and now their ideas bear

¹⁹ Evidence of this fact is found in the limited use of the leading question. See Hollingworth & Poffenberger, *Applied Psychology*, pp. 254-256.

²⁰ E. B. Titchener, *A Beginner's Psychology*, p. 186.

the memory-label. Here, then, is one source of the 'un-trustworthiness' of memory which is at the same time a possible source of the Platonic doctrine of reminiscence."

When a lawyer thinks that the memory of the witness has become perverted through much talking, he had best examine carefully to determine just how much talking there has actually been; how many times has the witness told the story; and how many people have listened to it? Counsel must also be careful to see that the opposition does not manufacture memory by encouraging endless discussion.

Under the class of illusions which misrepresent the manner of the happening of events there are many illustrations. Suggestion also comes under this classification, for not only may it create entirely but it may distort. The suggestion may not necessarily be from external sources. A person observes a situation but there is a break in his observation or attention. The distraction usually occurs without the witness in the least realizing that a break in attention has resulted. Not realizing that the chain has been broken, the imagination steps in and suggests a plausible, though probably inaccurate, connection. Fakirs and pickpockets accomplish their purposes when the attention is distracted. I remember a case in which distraction of attention helped to determine the amount of damages. A child had been struck by an automobile driven in a negligent manner. There were several witnesses to the event. The point involved was as to the conduct of the driver after the accident. It seems that distraction of attention had resulted, so that the witnesses were not sure what the driver

did. No one seemed exactly to know. Some said that he did not even get out of the car. Some said that he did. Some said that he offered assistance. Some said not. His conduct was not definitely shown.

Bias also warps the memory as it warps most things which come into contact with it. A person who is biased will usually remember only those things which agree with his opinions. This is one reason why the evidence of a close friend or relative should not have as much weight as the evidence of a disinterested person. Bias is powerful, and counsel will do well to watch for it. Exposure is the only way to escape its harmful influence. Then it may become a detriment to its own possessor.

Under the class of illusions which falsify the date of events remembered comes all those illusions when we assign to experiences certain dates, when in reality we did not experience the situation until later. Thus, witnesses have been known to testify that a man had a guilty appearance over a number of months when in reality they did not notice his appearance until the last time they saw him, namely, when he was arrested.²¹

²¹ There are a number of excellent references on the subject of memory, a few of which are as follows: Guy Montrose Whipple, *The Obtaining of Information: Psychology of Observation and Report*, in the *Psychological Bulletin*, July, 1918; W. B. Pillsbury, *Essentials of Psychology*, Rev. Ed., pp. 204-236; *Education as the Psychologist Sees It*, pp.

139-179; Stephen S. Colvin, *The Learning Process*, pp. 128-144; Robert S. Woodworth, *Psychology*, pp. 332-363; William James, *Principles of Psychology*, Vol. I. On the subject of illusions I would suggest: G. F. Arnold, *Psychology Applied to Legal Evidence*, 2nd Ed., pp. 198-204; Hans Gross, *Criminal Psychology*, pp. 275-279.

Before we leave the subject of memory there is one fact which should be emphasized. Many people think that the correct recall of one feature of an event makes certain that other features of the same event are also being correctly recalled. This is not the case. Correct recall of one part of a situation does not guarantee the correctness of recollections of other parts of the same situation, even though there is logical connection between the facts recalled.

→ We will now leave the subject of memory and consider another mental qualification which a witness must possess in order to have the ability to testify accurately. This quality is termed the power of expression. No matter how accurate the observation, how clear the comprehension or how enduring the memory may be, the witness is without value unless he can express his thoughts in words.²² At every turn we are beset with words. They are the main vehicles of expression. On the witness stand it is words that count. A witness who uses forceful words and plausible words is much better than a witness who does not. Consequently, in considering the ability of a witness, it is always well to consider the power of expression. Where any one of several witnesses may be used, the power of expression may serve as a guide to a choice between them.

So far in this chapter we have been considering the ability of the witness to testify accurately. Many obstacles have been pointed out. Many of these are vividly typified in an amazing case reported by Swift.²³ Although fairly long, we will repeat it here.

²² Hans Gross, *Criminal Psychology*, p. 287.

²³ E. J. Swift, *Psychology and the Day's Work*, pp. 273-277.

"In 1871 Alexander Jester started east from Kansas in a light spring wagon with canvas top, drawn by two small pony horses. While fording a stream near Emporia, as the horses were drinking, he fell into conversation with Gilbert Gates, a young man who was returning from homesteading land in Kansas. Young Gates was traveling in what was then known as a prairie-schooner drawn by a pair of heavy horses. Jester had three young deer in his wagon, and Gates a buffalo calf. They decided to travel together and give exhibitions with their animals to meet expenses. When they reached Paris, Missouri, Gates had disappeared. Jester's explanation, at the preliminary hearing, was that he became homesick and sold his outfit to him that he might hasten home by rail. Jester was seen leaving Paris driving Gates' heavy team with his own lighter team tied behind. Later he sold the heavy horses and various other articles known to have belonged to Gates, but which he claimed were purchased. It is not the purpose of the writer to decide the merits of the case, but rather to call attention to certain exceedingly interesting psychological features.

"Jester was soon arrested but escaped, and was not brought to trial until 1901. Thirty years had therefore passed since the events concerning which witnesses were called upon to testify. Besides, there was a blinding snow-storm at the time when the crime was supposed to have been committed; and, of course, this would have interfered with accurate observation. Further, when the witnesses 'saw' the things which they related, they were not aware that a crime had been committed. Two preliminary questions thus suggest themselves: First, would anyone note, as carefully as the subsequent testimony indicated, the

peculiarities of a chance traveler on the road, especially in a blinding snowstorm, and at a time when no reason existed, so far as is known, for unusual observation? Second, would observers, under these circumstances, be likely to remember, after the lapse of thirty years, the minute details of what they had seen? The incidents were of the unimportant, uninteresting sort that were frequently experienced at that time. Even the prairie-schooner could hardly have been exceptional enough to attract special attention, since, as will be seen later, one of the witnesses was taking his wedding trip on horseback, with his wife behind him on the same horse. But let us turn to the testimony.

“When the trial was held, two women described the size and color of all the horses, the harness of the heavy team, the figure and appearance of Jester—height, a little over six feet; weight, about one hundred and eighty pounds, with a hook-nose, gray eyes, powerful physique, and large hands. They further testified that, looking into the first wagon as it approached, they saw lying in the bottom the outlines of a human form with a buffalo-robe thrown over it; and they gave this testimony confidently, thirty years after the crime, notwithstanding they were twelve and fourteen years of age, respectively, when the events transpired, and though they were riding at a canter in the face of a heavy snow-storm, with veils tied over their faces, and the horses which they met were traveling at a fast trot when they passed in the storm. A farmer swore that the buffalo-robe was covered with blood, and still another witness that, while helping Jester start his wagon, the canvas blew back and he saw the body of a man with his throat

cut. The description of the body was that of young Gates.

"A man who had just been married, and was taking his wife behind him on his horse to their new home, described the horses attached to each wagon, the wagons, and the dog; and this in spite of the fact that his own horse was going at the 'single-foot' gait, that Jester's horses were trotting fast, that it was snowing hard, and that, being on his honeymoon, other thoughts and interests would seem to be occupying his mind.

"A man of thirty-six, who consequently was six years of age at the time of the crime, testified that later, during the thaw and heavy rains of spring, he and his father saw the body of a young man of eighteen or twenty years of age floating down the stream. He described the color of his hair and complexion, and said that he had on a blue-checked shirt and blue overalls. His description of the shirt agreed with that of Mrs. Gates of a shirt which she had made for her son. It is interesting to note, in this connection, that neither the father of the six-year-old boy nor the girls who saw the outline of a human form in the wagon, nor the man who helped start Jester off, said anything about their observations until Gates' disappearance and Jester's arrest had been published."

The witnesses in the foregoing case were people of good repute, who would not willfully testify to a falsehood and who honestly believed that they were telling the truth. But to those who have had some experience with witnesses it is perfectly obvious that no casual witness could testify so accurately after such a number of years. Swift goes on and tells us how it all happened.

"The key to the mystery lies in the way in which the

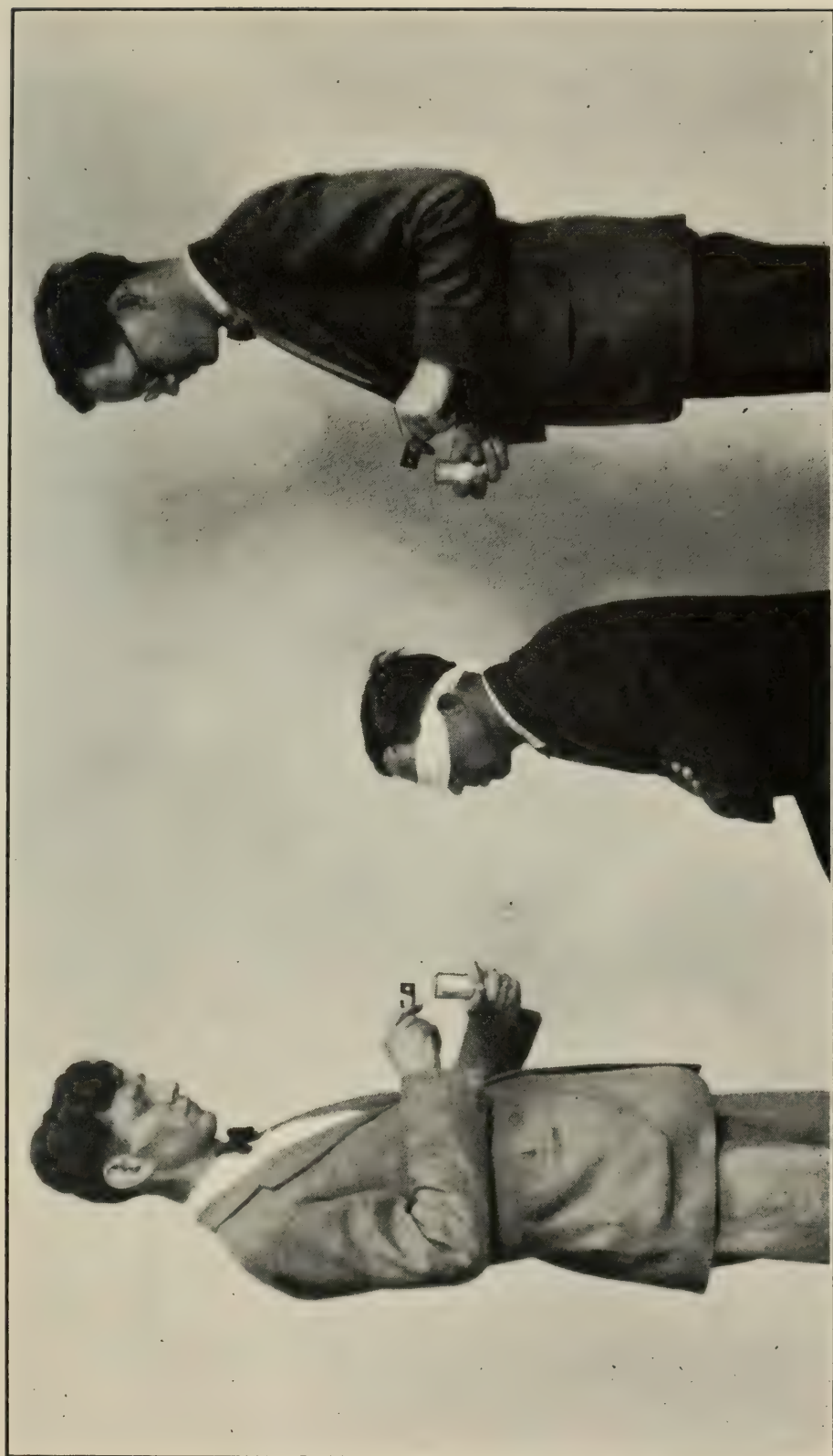
case was worked up, in the publicity that it received, and in human psychology. After Jester's final arrest, Pinkerton detectives were employed and seven or eight leading criminal lawyers of Missouri and Chicago were engaged to assist the prosecution. The detectives, as they secured one fact after another, cultivated the information by suggestive questions and statements to those with whom they conversed. When, for example, a prospective witness said that there was a buffalo-robe in the wagon the detectives would ask if it covered the outlines of a human form. The man would think it likely, and soon that it did. Of course the case was featured in the county newspapers. It was a first-class news story. Pictures were published, pictures of Jester and Gates, pictures of the horses and wagons, pictures of the dog, and pictures of scenes in the chain of events leading to the alleged crime. The pictures were based on what witnesses said they saw, and what the detectives said they must have seen, and reportorial imagination supplied whatever was lacking. The clothing of Gates was described, the articles he had with him were enumerated, the facts to which certain witnesses would swear were told to other witnesses and reported in the newspapers. Indeed, all the events of the crime as it was conceived by witnesses, reporters, and detectives were portrayed and described with much the effect of a moving-picture representation, until fact and fiction were indistinguishable. It is a well-known principle of psychology that if you tell a man something often enough he finally accepts it; and as he continually repeats it, even as a possible fact, it ends by becoming firmly fixed. Then he believes that he saw or heard it."

Whipple²⁴ has covered the subject of the psychology of observation and report for use in the Students Army Training Corps during the last war. It applies substantially the same to lawyers. It is so excellent that we can not refrain from at least giving some of the subject heads under which he divides the subject.

1. The first condition for getting accurate information is the possession of reasonably efficient sense organs.
2. Men differ in their capacity to see colors.
3. Men whose vision is perfectly normal differ much from one another in visual acuity, that is, in the sharpness of vision.
4. Men who are equally good at seeing in daytime may be unequally good at seeing at nighttime.
5. To get the best results with the night eye it is necessary that the retina of any observer should have a certain amount of time to get used to the dim illumination.
6. The twilight eye sees better out of its "corners" than straight ahead.
7. The twilight eye sees no colors.
8. In using the sense organs there appear certain illusions, common to all persons, and these, if not understood, may lead to false interpretations of what is being observed.
9. Under some conditions an observer may believe that he has perceived an illusion when in reality he is the victim of an hallucination.

²⁴ Guy Montrose Whipple, The Obtaining of Information: Psychology of Observation and Report, in the Psychological Bulletin, July, 1918.

10. Hallucinations may affect any man and are especially liable to occur under abnormal nervous conditions, like extreme fatigue, druggery or emotional excitement.
11. Observation is peculiarly influenced by expectation.
12. The degree of attention that can be given is not constant but varies from moment to moment.
13. Whenever any interval of time elapses between the actual carrying out of observation and the recording of it by word or gesture or pen, the accuracy and completeness of the record tends to be reduced by errors of memory.
14. The most common inadequacies of memory are errors of omission.
15. The recall of what has been observed is liable to falsification by erroneous insertion.
16. The recall is liable to falsification by substitution.
17. The recall is liable to falsification by transpositions in the time, order and space arrangement of items.
18. The omissions, insertions, substitutions and transpositions that affect the accuracy of recall are often quite unnoticed by the observer.
19. The correct recall of one feature of an object or event does not guarantee the correct recall of other features of the same object or event, even though these features seem logically bound up in one another.
20. When a number of persons report upon the same matter, those details upon which agreement appears may in general be considered as correct.
21. But if a number of persons agree perfectly in their statements about numerous small details under cir-



Experiments show that depending on the ears alone it is difficult for a witness to tell whether a noise is directly in front or directly behind.

• cumstances such that observation must have been difficult and memory of them must have been liable to unintentional error, then suspicion is justified and collusion probable.

22. When the truth is to be ascertained by the examination of several witnesses, of the same event, these witnesses should be examined separately and, if possible, before they have been able to exchange ideas about it.
23. Items recalled by interrogation, though unmentioned in the narrative, may often be reported as accurately as other items that were mentioned in the narrative.
24. The amount of error in the deposition depends much on the skill with which the questions are framed; it is considerably increased if the interrogatory contains suggestive questions.
25. If by an error is meant any distinct discrepancy between items reported and the actual facts, it may be laid down as a rule that even in the case of competent adults, observing and reporting under favorable conditions, an errorless report is the exception. On the contrary, if the report attempts to get down to details, the average reporter will make a score of about 75 per cent. in accuracy not counting omissions as errors.
26. Estimates of distances, heights, angles, numbers and dimensions of objects are open to considerable inaccuracy and are often subject to constant tendencies to over- or underestimation.

Some of these topics might well be repeated later on in the chapter so the lawyer will do well to keep them in mind

as applying not only under the subdivision devoted to the ability of the witness but also under the subdivision devoted to the veracity of the witness.

2. Veracity of the Witness

The question as to truthfulness of evidence has always presented a serious problem with which our courts have had to contend. Courts are institutions established for the avowed purpose of administering justice. The justice which they administer is, however, made partially dependent upon concrete, very human facts. When the facts fail, either in sufficiency or in accuracy, justice also fails. Abstract justice is only as strong as the human beings which support it. Many people fail to realize this truth. They think that human beings can create and operate legal tribunals which will have none of the weaknesses of the creators or operators. It is impossible.

In the light of such facts, in order that justice may be as nearly approximated as possible, it is necessary that the evidence presented in our courts be as complete and as accurate as possible. The carrying out of this duty is entrusted mainly to the members of the bar. Upon them devolves the burden of seeing that every verdict and judgment is an equitable result of all the facts.

In the first division of this chapter we discussed the inherent ability of a person to give testimony as a witness. We saw that that ability varied with the physical and mental characteristics of the person. A handicap of either one could cause a weakness in testimony. We were concerned with the inherent abilities of the person, and we assumed all the while that the person was trying to be a

good witness. This latter assumption we shall carry over and maintain during the first part of this section, until we come to the matter relating to wilful falsification.

Psychology seems to offer the lawyer very little assistance in the search to uncover innocent perjury. One field of experimentation, however, along these lines has been with forms of questions. It has been shown that the form of the interrogation has some effect on the truth of the reply. This is an exceedingly interesting and important fact. Here, for instance, is a witness. If one form of question is used the answer may tend to be more truthful than if another form of question be employed.

"Thus it has long been recognized that the way in which a question is asked has an important influence on the actual correctness of the answers made to it. By various details of its construction the question may convey implications, suggest replies, or eliminate alternatives. In legal procedure the leading question has long been regarded as a possible source of fallacious testimony, but not until recently has there been an attempt to clearly discriminate the various types and degrees of leading questions from each other. Recently in France, Germany and England, experiments have been made in order to measure the reliability of answers as conditioned by the form of question.

"Muscio's investigation may be referred to by way of illustration. Using moving-pictures as material for observation, he asked questions, all of them of a leading character, and he tried to measure the influence of different question forms. He used eight different question forms, as given in the following table. Careful examination of the questions as here given will disclose their varying degrees

of suggestiveness. The figures indicating the type of answer indicate the per cent. of correct, wrong and uncertain replies, when the results of several experiments, in which all the questions in the table related to actual occurrences, were combined.

Form of question	Times		Uncer-
	asked	Right Wrong	tain
(A) Did you see a —?_____	171	12 2	81
(B) Did you see the —?_____	95	31 7	62
(C) Didn't you see a —?_____	102	23 3	74
(D) Didn't you see the —?_____	81	16 1	83
(E) Was there a —?_____	173	32 25	43
(F) Wasn't there a —?_____	167	38 28	34
(G) Was the (K) m or n —?___	137	36 28	36
(H) Was the (K) m —?_____	136	23 44	33

"The results were found to vary with a number of circumstances which can not be considered here. In general, however, the following conclusions were suggested. By using the definite article (the) instead of the indefinite (a) the suggestiveness, caution and reliability were all decreased. Introducing the negative (not) into the question decreased caution and reliability and increased suggestiveness. By asking whether certain things were present or occurred, rather than whether they were seen or heard, suggestion, caution and reliability were all decreased. By asking concerning the presence or occurrence and also including the negative, suggestiveness and caution were decreased. Including both the definite article and negative gave more complicated results. The so-called implicative question (Was the (K) m?) was found to be lower than

all other question forms investigated, for suggestiveness, caution and reliability. The incomplete disjunctive forms (Was the (K) m or n?) was found to possess a relatively high suggestiveness, a relatively low caution, and a relatively low reliability. In general and with certain qualifications the investigator concluded that the most reliable form of question was that which related to the actual seeing or hearing of an item, using neither the negative nor the definite article."²⁵

However interesting the foregoing quotation may be, the lawyer can derive but little practical assistance from it. The only thing the lawyer can learn is that suggestion in the form of questions leads to the usual errors of suggestion. The only safe way for the lawyer to know that innocent perjury or unwillful falsification is being committed by a witness is to have learned the known truth from other sources.

Heretofore, in our consideration of the accuracy of evidence, we have confined our attention to that class of testimony which is believed to be true by the witness giving it, and which, independent of the intention of the witness, may have been false. We will now leave this branch of the subject and pass on to a consideration of that class of evidence which the witness knows is false, and which is given in the knowledge that wilful perjury is being committed. It is the lamentable, yet truthful fact that there are some people who have little or no regard for their oaths, and who are content complacently to commit perjury

²⁵ Hollingworth & Poffenberger,
Applied Psychology, pp. 254-256.

knowingly. Fortunately this class is not as large as many of the destructive critics of the law would have us believe, yet, while the class is small, the evidence presented by it is usually so important or so aggravating that its detection merits the attention and effort necessary to disclose its fraudulent nature. Lying is a mental trait recognized by the psychologist and handled by him with unfailing success in many instances.²⁶

Few people possess the ability to be real good liars. That is, few people have the ability to conceal their perjury. It requires a high degree of talent and much practice to show no outward manifestation of the inner guilty feeling. The amateur liar, who lacks the technique of the professional, may be usually recognized as such by an inability to meet the eyes of the examining lawyer, by squinting, by twitching the muscles of the face, by blushing, by constant swallowing, by cold sweat, by an extreme or unusual nervousness, by volubility, by overexplanation or by a peculiar tone of voice. The amateur liar usually has a poor memory which is fatal to a liar. Often such witnesses have been trapped when, after they have committed the perjury, they are led away from the subject only to be suddenly brought back again with a rude shock. Names and numbers are particularly difficult things to remember even when true, so that perjury concerning them is one of the easiest kinds detected. A rapid fire of questions, such as no mind can follow except that prompted by a truthful conscience, often displays wilful falsehoods. Falsehoods, when detected, are extremely detrimental to the side which commits them.

²⁶ See Appendix A.

They discredit not only the particular testimony in which they occur but also a great deal more. The jury seems to think in a trend like this: "Here we have detected a falsehood. If there is one falsehood we have discovered, how many more are there which are still concealed. Thus we must hesitate to believe any of the testimony. It may all be tainted."

Perjury may sometimes be detected by the agreement of several witnesses. If several witnesses agree perfectly in their statements about small details the observation of which must have been difficult and the memory unlikely, there is reason to believe that perjury is being committed. Collusion of witnesses is perjury.

Many scientific attempts have been made in recent years to develop methods which would reliably show when perjury was being committed. Some have proved quite efficient; some not so efficient. More are still in the experimental stage. Few have ever been used as evidence in a court. Most courts would probably refuse to allow any veracity test until the test had definitely proved itself to work uniformly and accurately in the detection of lies.

One proposed method is that sponsored by Munsterberg and used in court by him. It is termed the veracity test by association reaction to critical words. It depends for its validity upon the mental process of association. Association is simply the connection of one idea with another in the mind. All of our ideas have associations. When an idea comes into consciousness, it acts as a stimulus to recall the associated idea to consciousness. The method is adapted by preparing a list of critical words which are probably associated in some manner with the subject mat-

ter of the falsehood. The subject is then told that he will be given a word, and that he must reply with the first word that comes to mind. The responses are taken down, and the time is measured between the giving of the word and the receiving of the response. The subject may show perjury in several ways. There may be definite suggestions of perjury by the response; the response to words involving the perjured matter may be slower than the responses to other words; there may be a different type of response to the critical word when it is given in a different relative order; or the response may be unduly stereotyped. In order to attain any degree of success in this experiment it must be given not only by a person who has become expert in the giving of such a test, but it must be given by one who knows how to accurately interpret the results. When so given and interpreted it would seem to be of some use in determining such a type of perjury as is involved in the attempted concealment of the commission of a crime. Then it can be used by the police under controlled external conditions. Whether it can be successfully given during a trial seems uncertain. There are many collateral factors involved. The most that seems possible to expect is that the conclusions of such a test given out of court by competent testers may be permitted to be used in court as evidence.

Various mechanical means have been used in the endeavor to provide an accurate lie detector. They are all based upon the principle of mind affecting body. It is a recognized fact that various mental states, particularly the

emotions,²⁷ either cause or are caused by changes of a physiological nature. Thus fear may cause violent motion of the body such as fighting or fleeing. Other mental states may cause changes in respiration, in heart beat, in blood pressure, in glandular secretion or excretion, etc.

Marston, a former pupil of Munsterberg, endeavored to make use of the change of blood pressure diagnosis to determine deception. If there was a change in blood pressure of over 10 mm. he concluded that there was deception. Records were kept of all questions and responses of a physiological nature, and there was a high degree of accuracy obtained.²⁸

From this beginning the Berkeley lie detector was developed. The scientific term for the apparatus is cardiopneumo-psychograph. By means of sensitive recording needles on a tape, a graphic record is secured of the subject's respiration and blood pressure while he answered a number of questions, some of which are associated with the matter in question and some of which are entirely unconnected. The instrument not only measures the respiration and blood pressure but records the intermittent time between question and reply. An illustrative examination of this type is given in *Science and Invention Magazine* for November, 1922. It is here given.

"Subject No. 1, with both instruments secured in place is seated in the chair, and given rapid cross-examination.

²⁷ Arthur I. Gates, *Psychology for Students of Education*, p. 169.

²⁸ W. H. Marston, *Psychological Possibilities in Deception*

Tests, *Journal of American Institute of Criminal Law & Criminology*, Vol. XI, No. 4.

Personal questions are being asked, because answers to these are always likely to be concealed.

"Q. Have you read the paper this morning?

"A. No. (No change in pulse beat or blood pressure. See Graph.)

"Q. You have recently made a bit of money, have you not?

"A. Yes. (Again no change.)

"Q. Is it true that you spent more than \$200 last week? (There was a slight hesitation between the question and answer and the reply made was 'yes.' Note the increased rapidity of the pulse (A). The blood pressure in this individual, normally 120, rose to 126, and then dropped almost as suddenly.)

"Q. Do you like motoring?

"A. Yes.

"Q. This instrument indicates that you told a lie in reference to the \$200.

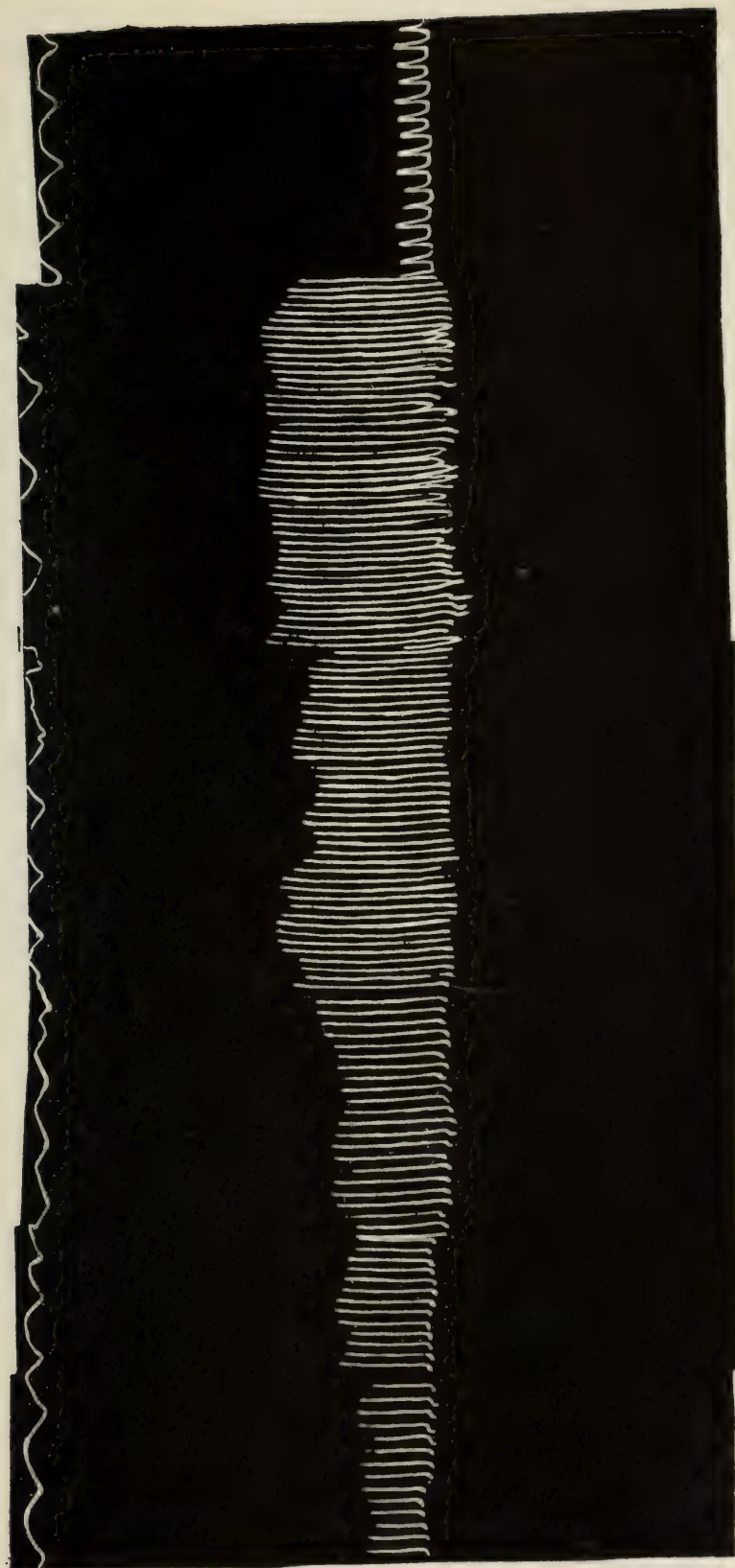
"A. No, I did not. (Here again the blood pressure increased to 128, and the pulse beat much more rapidly than at first.)

"Confronted with these facts and others the subject later admitted that he still had the \$200."

A very comprehensive and interesting speech was delivered by Dr. John A. Larsen²⁹ of Berkeley, California, at the annual meeting of the American Bar Association in San Francisco in 1922, in which he reviewed the entire field

²⁹ Dr. John A. Larsen, Reports of American Bar Association, Vol. XLVII., 1922, pp. 619-628. See also The Cardio-Pneumo-Psycho-

gram in Deception, by Dr. Larsen, published by the State of Illinois, Department of Public Welfare.



T-1 T-2 T-3 T-4 T-5 H.C.
A graphic record of deception produced by Dr. Larsen with the Cardio-Pneumo-Psychogram. (From Institution Quarterly Department of Public Welfare, State of Illinois.)

of deception tests. That speech is given in the Appendix under Exhibit A. The reader is referred to it for complete information. It might be well to summarize here the eight results of such tests as stated by Dr. Larsen in his speech.

(1) The association words with the time reaction do not give as definite results as the cardio-respiratory.

(2) Blood pressure determinations are not as reliable as a study of the graphic records.

(3) In every case of deception as examined by the cardio-pneumo-psychograms and checked by confession there are marked changes in the records.

(4) The marked irregularities due to the effects of repression involved in the deception process disappear with the confession.

(5) Physiological or pathological factors do not appear to interfere with the test, provided that the subject is able to understand the questions and is not unfit mentally, as in some of the imbeciles and psychotic individuals.

(6) In this test a graphic record is obtained which represents in visible form the emotional wave which we may term the cardio-pneumo-psychogram.

(7) Interesting records have been attained with drug addicts. The transition from the very sick moaning, miserable individual to the very cheerful one may be shown graphically by comparing the record of the same individual before and after an injection of the drug.

(8) The cardio-pneumo-psychogram is in the form of a permanent record which is easily preserved and could form the basis for court use after thousands of standards have been drawn up.

These experiments with veracity tests show that some studies have been made toward the solution of the problem of falsification by witnesses. Whether some mechanical means can be devised which will work perfectly in all cases seems difficult to predict.

Before we leave the subject of veracity of witnesses there is one detail which might be valuable to the lawyer to consider. Why is it that a jury will believe one witness and disbelieve another where the words spoken were of equal inherent strength? Certainly the personality of the witness accounts for this condition. A nicety of expression, a pleasing tone, a frank manner, a look of sincerity, an earnestness of delivery or an expression of innocence may turn the trick. People have formed certain ideas which they associate with truth. It is always well for counsel to cultivate these features in witnesses. It is never wise to oppose them.

3. The Expert Witness.

The expert witness occupies a peculiar psychological position in a law suit. He is one who is not only permitted to testify as to facts which he knows, but he is one who is permitted to draw conclusions, inferences and opinions from the facts as he knows them or from the facts as he assumes them to be. This wide latitude in testimony is permitted because the expert has had special training or skill which makes his testimony more accurate and authoritative. The presumption is, then, that the testimony of an expert witness must carry a great deal of weight. This is not always the case. Juries have been

known to disregard entirely such evidence. Why the evidence of experts is at times given great attention, and at other times given little attention is difficult to determine accurately.

The lawyer who introduces the expert is sometimes at fault. He overlooks the most impressive thing. He seems to think that the main purpose of the qualifying evidence is to satisfy the judge that the witness should be allowed to testify as an expert. Where this conception is held by counsel a great deal of the force of such testimony is lost. The main psychological purpose of the evidence which qualifies the expert is not to show that he is competent to testify. This is, of course, a necessary purpose; but it is only a secondary one in importance. The main purpose is to lay a foundation for the evidence which follows. An impression must be created in the minds of the judge and the jury. No hurried examination will do. The necessary time must be taken not only to qualify the witness as an expert but to show the value of expert testimony. Unless the position of the expert is definitely established at the beginning it might just as well not be established at all. The evidence will then be of no greater value than that of any other witness. The lawyer must remember that the jury probably has only a hazy idea of the nature and purpose of an expert witness. Hence, in order to produce the greatest possible effect, it is necessary not only to qualify the witness as an expert, but to show, by manner and interrogation, that great weight should be attached to such testimony.

The force of the testimony of an expert is sometimes lessened because the witness testifies as to matters, which,

while true, seem improbable to the jury. To the expert, difficult things are easy, but they are not so to the jury. A case of this kind is recalled in which the evidence of the expert was entirely disregarded by the jury. The expert was an architect. The case involved some construction work in which some concrete had cracked. The architect, a man of unusual knowledge and wide experience, testified that certain concrete need not have cracked if it had been composed of the proper materials, including washed sand, etc. The jury thought that he was exaggerating considerably, and paid no attention to any of his testimony.

The question as to when it is desirable to have an expert is sometimes uncertain. When a technical matter is involved such as one of medicine, or accounting, or architecture, it is usually good practice to call in an unprejudiced expert, especially if the opposition is also employing an expert. In other matters of fairly common knowledge, but within the province of an expert, when shall we have an expert? It seems that an expert should be of value in such matters when laymen are uncertain, ignorant or when they disagree. An expert has a difficult task, however, when he tries to run current to uniform lay testimony.

How may the testimony of an expert be overcome? Experts of greater reputation may be employed to show that the one is wrong. Sometimes an attempt has been made to show that the expert is a theoretical, and not a practical man, and hence the practical men of the jury should not believe him. Probably the most insidious way of weakening an expert is to show that he is being paid a fat sum of money to testify. A man may be able to testify impar-

tially under such conditions, but a jury does not think so. However legitimate and professional the practice may be of paying a tidy sum to the expert, the jury will always look on such procedure with suspicion. They may even feel that it is in the nature of a bribe. It is human nature to feel that a person who is being paid by one party will work for the interests of that party. In reality this feeling has considerable foundation in fact.

4. The Separation of Witnesses.

The main object in separating witnesses is to prevent collusion. Where there are a number of witnesses to the same event, and where it seems that they have conspired, or will conspire together to testify exactly alike, they should be examined separately, and if possible before they have had an opportunity to exchange ideas.

There are two psychological effects of separating witnesses. The first is the practical effect on the witnesses themselves where they realize the purpose of the procedure. The second is the effect on the judge and the jury.

The effect on the witnesses is that of caution because, if they realize the purpose of the separation, their suspicions are probably aroused. This tends to prevent any studied uniformity of testimony, and influences a witness to be more truthful in those cases where perjury might otherwise occur. It does not absolutely prevent collusion. It simply makes it more difficult to obtain, but more subtle when obtained. The witnesses have to be more thoroughly and completely educated to their parts.

The second effect is that created in the minds of the judge and of the jury, when they know the purpose of separating the witnesses. Certainly no greater weight should be given to the testimony of witnesses who have been separated, yet frequently this is the result. The reasoning of the judge and the jury on this proposition seems to be that uniformity of evidence where collusion is made difficult implies greater truth. It does to a certain extent. But, even so, it is never safe to give greater weight to such evidence than to any other evidence. Because greater weight is sometimes given to the testimony of separated witnesses it would seem inadvisable to ask for a separation except when fraud seems present.

5. Depositions.

Under this heading we wish to say a word as to the relative effects created by a deposition and by a personal testimony of the witness in open court. When the testimony of a witness is taken prior to the trial, is reduced to writing, and is read at the trial the personality of the witness is largely lost. A speaker who reads his speech does not get the attention nor the interest that he would if he spoke without manuscript. All of us realize this condition. A picture of a person does not create as great an effect as would the sight of the person. No copy can equal the original when it comes to evidence. It is much more difficult for a jury to follow a long deposition, than it is for them to follow a long examination in court. It is more difficult for a deposition to create a lasting effect on them, than it would be if the witness were personally present.

There may be some cases in which a deposition is advisable even with these disadvantages. Sometimes it is the only possible manner in which the evidence can be obtained. Sometimes it handicaps opposing counsel. Sometimes it makes possible the acquiring of evidence favorable to our side at a time when opposing counsel is uncertain as to what matters are topics for cross-examination. These and similar situations may make a deposition a desirable kind of evidence, but it is, in the absence of such conditions, an almost uniform rule that a deposition should never be used where the witness is or can be made available for the trial.

6. Hearsay Evidence.

The rule that hearsay evidence can not ordinarily be admitted is founded on sound psychology. Such evidence is always less accurate than any other form because it depends on the veracity and competency of more than one person. Hearsay evidence does not depend on the ability or truthfulness of one person, but it combines in a cumulative manner all of the defects in observation, comprehension, memory and expression of all persons who have been parties to its development. The law has been criticised in an ignorant manner by some for the so-called technical rules of evidence. Some seem to advocate the sweeping aside of all rules by permitting all forms of evidence to be admitted for what they are worth. If hearsay were admitted under such provisions there would be no way in which to determine how much was truth and how much was rumor. Everyone is familiar with the manner in which hearsay evidence works. Many of the rumors were ab

initio founded on some facts, yet so many tongues have wagged in so many ways that truth has long since deserted, leaving only idle conjecture in charge.

7. Circumstantial Evidence.

Courts have defined circumstantial evidence to be that evidence directed to the attending circumstances; evidence which inferentially proves the principal fact by establishing a condition of surrounding and limiting circumstances, whose existence is a premise from which the existence of the principle fact may be concluded by necessary laws of reasoning.³⁰

Circumstantial evidence depends for its effect upon inductive reasoning. We have a large mass of collateral facts each of which would prove nothing individually, yet when we group them, sort them and classify them in various ways we obtain a conclusion which may be sound from the standpoint of probable reasoning. The chances are, however, that some link is missing. Most of the conclusions derived from circumstantial evidence are not conclusive. They are not entirely legitimate.³¹ Some of the connections are supplied by imagination and not by reality. Psychology does not help law in the matter of circumstantial evidence. It simply points out the weaknesses.

Circumstantial evidence covers a wide territory. There are all sorts, shades and degrees of it. Any evidence which does not directly prove the main fact is circumstantial.

³⁰ Henry Campbell Black, *Law Dictionary*, 2nd Ed., p. 201, citing many cases.

³¹ Herbert Austin Aikins, *Principles of Logic*, 2nd Ed. Rev., pp. 361, 362.

How much circumstantial evidence is necessary in order to form a sound mental judgment? If all possible circumstances must be taken into consideration, and accounted for, and they are not, then a loop hole may probably be left for escape.

When counsel deals with circumstantial evidence he needs to know psychology and logic, as well as law. Facts must be marshalled in the most logical order for the greatest effect, while one must know fallacies in order to point out the defects in the circumstantial evidence of the opposition.

CHAPTER V

THE CHILD AND THE WOMAN.

1. The Child.

In all of the chapters heretofore, we have discussed only those phases of psychology which directly related to normal adults. That the mental processes and actions of a child differ in many respects from those of an adult, and that the influence of a child in court, either as a witness or as a party, varies from that of a grown person, make necessary this chapter pointing out the numerous differences and the results thereof. The protecting arms of the law in the shape of juvenile courts, the appointment of guardians, the voidability of contracts and numerous others, all proclaim a difference of mental responsibility from that obtaining after the age of maturity has been reached. The mental content of a normal adult is a combination of the endowments of heredity and birth plus the development and modification of these factors through environmental forces. With the child, however, we have but the first of these in toto, and as much of the latter as the age and experience of the child indicates. Constantly throughout life the total

self of the individual changes.¹ Reason, memory, attention, will and the like vary with physical and mental growth.

The life of the child begins with the fertilization of the ovum in which are contained the elements or determinants out of which the various bodily organs and functions develop. Particular determinants grow into particular sense organs, particular bones, particular teeth and so on. For the most minute traits, such as the color of the eye or the shape of the ear, there are determinants in the original cell. At birth these traits are not in their final form but they continue to develop.²

"The child begins his mental career with the physiological conditions of mind already highly organized. Heredity has furnished him with an equipment which is not only rich in detail but rather insistent in its demands that the subsequent mental and physical life of the child shall follow certain prescribed pathways. The child is furnished at birth with a variety of instinctive activities and with a still greater variety of functionally active reflexes. Upon this background, the experiences of life are placed, being modified and in turn modifying the experiences already present.

* * * After several months, accordingly, the child begins to act in ways that appear to be more and more modified by his past experiences; and as he grows still older we may detect evidences of an increasing degree of organization in his mental life."³

¹ Arthur I. Gates, *Psychology for Students of Education*, pp. 110-129; Coleman R. Griffith, *General Introduction to Psychology*, pp. 131-157.

² Arthur I. Gates, *Elementary Psychology*, pp. 108, 109.

³ Coleman R. Griffith, *General Introduction to Psychology*, pp. 132, 133.

Therefore, in all our considerations of the child we must hold the fact firmly in mind that the child is an immature person both mentally and physically. As we have already stated, the law recognizes mental immaturity by fixing an age at which the person may begin to make valid contracts. The law recognizes physical immaturity when it prescribes an age at which the person may marry. So different is the psychology of a child from that of an adult that one prominent author says: "The mind of the child stands uniquely alone among the minds psychology treats of, and it is, therefore, to be studied on its own account."⁴

Child psychology is one of the most important fields of psychology for the lawyer. It is, for instance, quite valuable to know that a child is not so reliable as an adult in the power of observation or in the ability to report correctly and completely what is presented to the senses, and that a child is particularly unreliable in the feeling of certainty or assurance which accompanies the report of what he has seen or heard.

We shall first consider the influence of the child in court upon those adults present. All of the adults, except those whose interests are directly in opposition to those of the child, will bear to that child a feeling akin to the feeling for the helpless. This feeling of sympathy is common to both man and woman. It is instinctive to protect and comfort the young and helpless.⁵ An unfair advantage is sometimes taken by counsel to play upon this instinct to secure

⁴ Coleman R. Griffith, General Introduction to Psychology, p. 132.

⁵ Arthur I. Gates, Psychology for Students of Education, p. 144.

benefits for the child which the actual facts and the law of the case do not warrant. As the justice of the law as administered by a fair and impartial judge and jury depends, however, upon an unprejudiced consideration of facts and not sympathies, it behooves the counsel whose interests might be prejudiced to negative this feeling of sympathy as far as possible. Often-times this may best be accomplished by an open statement of counsel to the effect that while all have a feeling of sympathy for the young yet that sympathy must not be allowed to unduly prejudice reason to the extent that the facts can not be impartially considered. This is an appeal by argument to substitute reason for sympathy.

Another instance of child influence, which may be prejudicial in court, is the false yet popular opinion that a child is more likely to tell the truth than a grown person. One prominent national advertiser, who should know better, fallaciously advertises: "If you want the truth, go to a child." Psychology does not bear out this conclusion of truthfulness. Lying is evident in all children.⁶ Then again, as we shall see later, a child is more liable to commit innocent perjury because its faculties of perception, reason, memory and attention are less accurate than they are in an adult. We must remember from a previous chapter that a deficiency in these faculties may cause a variation in the quantity or quality of the evidence.

⁶ Norsworthy and Whitley, *Psychology of Childhood*, pp. 160-162, 282. See also Hans Gross, *Criminal Psychology*, pp. 366-369. Gross found the testimony of

children to be better than adults in certain directions, because it was not so much influenced by passion and special interest.

One characteristic of a child's self and inner consciousness which varies from that of an adult is in the matter of attention.⁷ In the matter of pure undeveloped instinctive attention, there is no difference between a child and an adult, because both are compelled to attend at the presence of certain stimuli, but throughout life the person is constantly developing, modifying, and supplementing the original instincts so that at the age of say thirty years he can and will attend to stimuli to which he could not have attended, in the same manner at least, at the age of ten years. For illustration, how many ten year old children could give their attention to reading Holland's Jurisprudence, or to legislative enactments? This is because attention of this nature depends on something which the child has not acquired. Interest is one of these factors. The child has no interest in these matters. He has not lived a sufficient period to have acquired experiences and associations which would make the matter even comprehensible, let alone interesting enough to hold attention. In court we frequently find a similar condition. A child is asked to testify as to matters in which he had no interest, and to which he could not possibly have been attentive enough to have acquired anything near accurate impressions. From another viewpoint, the attention of the child is limited because his "span of consciousness" is limited. We know that at all times our sense organs and consciousness are besieged by numerous sensations. An adult can attend to more of these stimuli at one time than can a child. The

⁷ Norsworthy and Whitley, Psychology of Childhood, pp. 99-110.

child is handicapped because of the lack of certain habits of experience, as well as because of the complexity of the situation. As to the first of these, namely, the absence of certain habits, it is evident that the normal adult performs a great many of the ordinary actions of life, such as dressing, eating, walking and the like, without much conscious direction of effort and attention, while with the child these habits of efficiency have not been either formed or formed as well, so that more of a child's attention is directed to and consumed by these elementary actions. These common actions are necessary nearly all of the waking period, so that at no time is a child's attention free from them. Caesar has been a quoted example of how a person might attend to four different things at one time. He could do this only because some of these, at least, were of an habitual nature, and did not require a large amount of attention. If all were original actions his task would have been much greater. A child then, has not the power of giving his attention entirely to other matters when a great part is being required by the elementary actions of life, which in an adult require little or no attention because they have become habitual and automatic in operation. We shall see more of the operation of habits in a later chapter.

Reverting to the matter of the complexity of the object, we find that a person can attend to only one "conceptual system" at one instant. But the conceptual system of a child is less elaborate and less multifarious in details than that of an adult, with a consequent attention to only a few of the major impressions, the many other impressions being unobserved. Possibly it is because of this fact that a child's

mind can not grasp with ease the different angles of a proposition.

The attention of a child also varies from that of an adult in intensity, duration and character. The intensity or degree of concentration depends both upon the outer sense organs and upon the internal mental development, neither of which are fully developed in a child. Only experience teaches the proper method of adaptation, such as for instance, a muscular adaptation movement of the eye muscles to allow the fullest possible degree of stimulus to be received by the end organs in the eye and carried to the brain centers. Then again only experience can teach the fullest possible means of securing the most intense and clear consideration thereof when the stimulus does reach the brain centers.

In duration, the attention of a child is shortened not only by the ease with which it may be distracted, but also because of the poverty of the mental content in the shape of associated ideas. In order for attention to endure for any considerable period of time, there must be a constant change, but on account of the absence of experience and knowledge in the child he can see few possibilities, and when these are soon exhausted he has not other associated ideas which he may fall back upon. The duration of attention possible, however, varies in proportion to the acquiring of ideas and experiences. One child of ten might have a duration of attention twice in length of that of another ten year old. It is largely a matter of the environment of the individual, although practice has part to do with it.

Attention may be either voluntary or involuntary. Voluntary attention is forced attention resulting from the exercise of the will in the satisfaction of some felt need. Involuntary attention is spontaneous, created without the use of will, and dependant on some natural or already interesting appeal to the mind. The normal attention characteristic of childhood is of the latter type, although as the child develops, and as discretion and judgment appear, there is a gradual growth in an ever increasing degree of willed attention. This is but evidence of the increased capacity of the mentally mature to stand greater strain than the immature.

One more characteristic of the attention of a child, and we shall pass to another topic. This has to do with the matter of discrimination, or choice of objects for attention. A child will see an accident on the street corner, and yet what it sees or attends to, will likely be much different than what an adult might see. If the child has never experienced those sensations before, the attention is liable to be diffused, yielding a sensory illusion. In such a case there is no discrimination. In a case where all the sensations have been previously experienced, there is some discrimination. To what part of a scene will the child be likely to attend? Some parts may be forced on the attention, but from the remainder he will pick out the parts which have some interest to him, or which he can associate with previous ideas. The interests and associations of child and adult are different, and the discrimination resulting will likewise be different.

Coming now to the next mental difference between an adult and a child, we find that the ability of a child to perceive sensations correctly is much less than that of a grown person.⁸

Perception is the interpreting of sensations. According to one author⁹ it depends upon three things, namely: (1) the sensations experienced at the moment; (2) the power of discrimination, and (3) the results of past experiences that are reproduced more or less perfectly at the moment of perceiving.

In a child the last two factors offer broad avenues for faulty perception. The power of discriminating is, in its final analysis, but the power of attending to something and not attending to other things. We have already observed the many weaknesses of attention in a child so that in order to make ourselves clear here we need but to add that any weakness of attention may weaken perception.

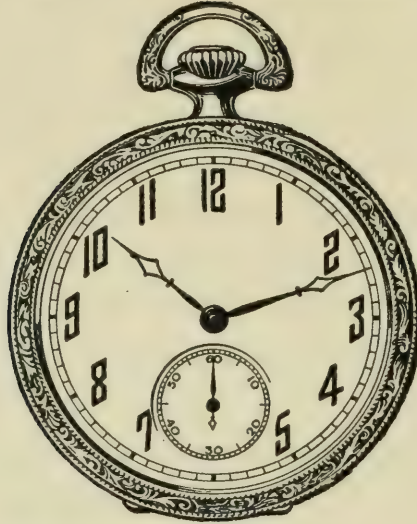
The third factor upon which perception depends, namely, the results of past experiences that are reproduced more or less perfectly at the moment of perceiving, makes the fact clearly obvious that man and child must differ widely in perception. Mature man has had many and widely divergent experiences while the child is limited in experiences by time, and family environment usually. Is it any wonder, then, that the perceptions of a child are immature, and often fantastic and emotional? I remember several years

⁸ Stephen Sheldon Colvin, in *The Learning Process*, has an excellent chapter on the nature of perception in the child. Another excellent reference on perception

is Chapter XIII in Gates' *Elementary Psychology*.

⁹ Edwin A. Kirkpatrick, *Fundamentals of Child Study*, p. 256.

THE DEVELOPMENT OF CONCEPTION OF A WATCH



Before
ownership

{ Pretty, bright, glittering object.
Pleasant to play with, stick in mouth and bounce on objects.
Makes a tick-tick noise.
Hurts when bumped against face.
Little thing moves.
Always held on chain by someone.

First
ownership

{ Pride in ownership. Nice to show others.
Learns to tell time.
Must wind to **make it go**.
Bright nickel case gets dull unless rubbed. Nickel wears off.
Parents' watches do not rub off because they are gold.
Watch stops when dropped. Must be taken to store to get started again. Parents scold.
Has many parts inside which can be taken apart but not put back together again.

Mature
ownership

{ A growing conception of utilitarian purpose as time becomes a more important factor in life.
Realizes care necessary.
Realizes the differences in quality and cost among watches, and such particulars as jewels, brands and kinds of cases.
Appearance being forgotten. Noticed when purchased or when something goes wrong.
Correct time the objective. Time the only thing seen when looked at.
Habits formed of winding regularly and of protecting from injury as experience shows the trouble, expense and incorrect time which result from improper care.
Checks with reliable clocks frequently.

The relative importance of such abstract a thing as time is not realized in the conceptions of a child.

ago in Cincinnati that the traction company was sued for a personal injury. One of the witnesses for the plaintiff was a child who saw the accident on his way to kindergarten. The attorney for the traction company argued to the jury that the evidence of the child should have little weight because it was simply one of those beautiful illusions of childhood.

A good illustration of the perceptual process of a child is found in the following illustration of the perception of a dog:

"The child at first perceives the animal and proceeds to deal with it much as he would with other objects with which he is familiar. He observes the legs somewhat like those of his toy chair, and seizing a leg by which to carry the puppy about, the child's idea is modified by the painful consequences. If the child squeezes the puppy too affectionately, as he might a stuffed animal, the yelp or possibly a snap results in the elimination of part of the old way of perceiving the pup, and the addition of new factors. The dog, in the course of time, is perceived and thought of as an object with sharp teeth, a certain weight, great strength and agility, a thing that mustn't be stepped on or immersed in water, which barks at birds, snaps when disturbed in feeding, and never talks, but is generally a playful companion. The child's idea of a dog is a changing, growing complex of particulars."¹⁰

Particularly noticeable among illusions of perception are those of distance, present for the first few years of life. At

¹⁰ Arthur I. Gates, *Elementary Psychology*, pp. 374, 375.

that period of life, the child is as likely to try to grasp at the moon as not. It is agreed, however, that after the first few years, a child becomes as accurate a judge of distance as an adult, so that the testimony of a child, say of six, as to distance, however inaccurate it might be as to other factors, would not be inaccurate on account of the lack of ability to judge distance. Of course there might be errors in expressing the measure of the distance perceived.

All sense perceptions depend at the start on physical growth. This physical basis develops rapidly during the first few years, and reaches maturity quickly. Even then the sense perceptions, while having a physical basis, are not fully developed themselves. They are still hazy and indefinite.

There are three main differences between the sense perceptions of a child and an adult.¹¹ The first of these is that a child's perceptions are less definite and less in detail. We have already spoken of the limited span of attention. This in part accounts for the lack of particulars in a child's perceptions. Many parts are really incomprehensible on account of lack of prior experiences. When the question of colors is concerned, we must remember that the power to discriminate between hues and degrees of brightness continually improves along with intelligence until the age of sixteen is reached. In sounds there is also improvement up to the ages of between ten and fifteen. In skin sensitivity

¹¹ Norsworthy and Whitley, *Psychology of Childhood*, pp. 115-117.

the order is reversed. The child is much more sensitive in touch discrimination than is an adult.

The second difference is in the amount of stimulus necessary to create a perception. A child needs a greater stimulus to produce a given perception than does an adult. Also a certain stimulus may, on account of its limitations, produce no perception at all in a child, while it would produce a definite one in a grown person who had become experienced to receiving that stimulus before. Variations in testimony between children and adults may be accounted for on this very score. The adult will see persons and events take place in a street accident concerning which the child had no chance to perceive.

The third difference in perception lies in the power of the mental pattern to vary the percept. All of us are influenced by our mental state, but the perceptions of a child are even more influenced by his mental pattern or state. Thus a child is extremely suggestive. Create, if you will, an idea of what the child is to hear or see, and the child is very likely to hear or see what you desire. Counsel, if he so desires, can practically control the testimony of a child by this means. He can so lead the child by indirect suggestion that the evidence will be wholly false and unreliable. This is, of course, unethical, but we must realize that it can be done, in order to make sure that opposing counsel is not guilty of such indiscretion, and in order to appraise the evidence of a child correctly. When the evidence of a child is of great importance, as it is sometimes, the only safe course is to fix the truth definitely in the mind of the child before the trial. This can be done by going over the evidence many

times so that the answers become experienced, if not almost habitual in nature. A story is told of a trial in which the plaintiff's case hinged upon the testimony of a child. Defendant's counsel got hold of the child before the trial, and through suggestive fixing so changed the testimony of the child as to make it extremely detrimental to the plaintiff when otherwise it would have almost made out his case.¹² Here is the instance:

In a justice suit for assault and battery between two farmers, near Iona, John C. Blanchard prosecuted and A. F. Bell defended. It was known that the complainant had been severely punished, and his son would be the only witness (aside from the parties) to the circumstances. This made his evidence intensely important.

Before the trial was reached, Bell managed to get a half interview with the boy, and used it in telling him of what a wonderful lawyer John C. Blanchard was. "Why, I believe he is the smartest lawyer living!" said Bell. "He can make white seem black. He can make a witness lie and tie him all up in lies. He is a wonderful man is John Blanchard."

"That made the boy's eyes fairly bulge out, for he expected something terrible would happen, and he ventured to ask how. Then Bell said: "Why, I'll bet he will even make you say your father didn't strike first, and you know of course that he did strike first, not a very hard blow, but just enough to set the fellow on."

¹² J. W. Donovan, *Skill in Trials*, 2nd Ed., pp. 121, 122.

"Don't you worry," said the boy, "I know father struck first, and he can't make me change that part."

Blanchard called the boy as a witness and at once boldly launched right into the real issue:

"State to the court, please, who struck the first blow."

"My father did," said the boy.

"You did not seem to understand me," said Blanchard, "I mean who struck first."

"Father did—but 'twas only a little blow."

With all the efforts of Blanchard, the boy was the more determined and braced to defeat his object, and Bell had a walk-away.

An excellent rule regarding susceptibility is that women are more suggestible than men, and children are most suggestible of all.

In the development of perception there are two processes going on at the same time. These are the processes of analysis and synthesis.¹³ Under the first, perception becomes more detailed and refined. Minute and subtle features are comprehended. Under the latter process, integration or building up takes place. Perception becomes more broad and inclusive. These two processes are constantly working throughout life.

Gates,¹⁴ says that errors of perception may be due to several types of causes.

1. To irregular or unusual conditions in the external world.
 - (a) As of a stick appearing bent when it is thrust into water;

¹³ Arthur I. Gates, *Elementary Psychology*, pp. 375, 376.

¹⁴ Arthur I. Gates, *Elementary Psychology*, pp. 385-393.

2. To defects, inadequacies or peculiarities in the human sense organs;
3. To inappropriate operation of the human perceptive mechanisms due to native limitations, to inadequacy of training, to the character of established habits of expectation, or to misleading interests or attitudes.

When any of these appear large or striking he classifies them as illusions.

Concerning memory it is possible to draw some peculiar comparisons between children and adults. Memory depends upon the plasticity of the brain matter and upon the associations formed which will serve as a recall.¹⁵ It seems that with children there is a greater plasticity or more open plasticity which accounts for the fact that in retentiveness of what they do remember, children exceed adults. Thus a child might remember some fact long after it was forgotten by an adult. But here the superiority of the memory of the child ceases. In immediate memory, the adult is far superior.¹⁶ This is obvious when we consider that an adult has so many more experiences and recollections with which he can connect the event in his memory, and which will serve to recall it if too long a period of time does not intervene. As to why these many associations formed do not entirely offset the occasional superiority of the child in memories over long periods of time, is uncertain. Probably it is due to the fact that so many new associations are constantly being formed as to tend to crowd out and to break the old ones.

¹⁵ William James, *Psychology*,
Briefer Course, pp. 292-296.

¹⁶ Norsworthy and Whitley,
Psychology of Childhood, pp. 132,
133.

Possibly also a clew may be found in the fact that the physical growth of the brain of a child is more rapid during childhood than in maturity, so that a path of discharge once formed would tend to change the physical matter more than is the case when the path was formed after the physical growth had largely been completed.

In the play of the imagination, the child's mind is far more fertile than that of adults.¹⁷ This trait develops more quickly in the young than do most traits, and is almost the sole faculty with which the young child thinks. Unlike the adult there are few associations, or meanings, or judgments occupying the attention and re-enforcing the reason, so that the flow of images passes unimpeded. The beautiful, the weird and highly constructive fantasies of childhood are familiar to all of us. The doll awakes to life; the wooden soldiers fight and fall; fairies fly about; and even Santa Claus rides in a reindeer sleigh. That these images are entirely original may seem to be the case, and yet it is not so, for images are created from past experiences. In childhood, the proportion of visual images is greater than of any other kind. Imagery with adults will likely be conceived of in terms of words as the means of expression, while in a child the image is conceived of as an object concrete in its entirety, yet not in terms of words, as words have not yet become for the child the great mechanism of thought that they are to the grown person.

¹⁷ Norsworthy and Whitley, *Psychology of Childhood*, pp. 150-167.

Remember that a large part of the child's reasoning is done by the use of images, that most of the images are in terms of objects rather than words, and that there must be a translation from object to word before they can be expressed. The many chances for errors predicate a very faulty reason as we shall see later.

There is another factor, namely, the vividness of imaginations which tends to make unreliable the mental conclusions of a child. The images of children are much more intense than they are in adults. This leads the child to lose distinctions between what is imagined and what is real. Imagined things become real to the child, and are told the same as if they had actually been remembered.

Consider for a moment what havoc this imaginative lying of a child would have on any testimony he might give. Indeed when might one ever be induced to place faith in the truthfulness of a child, for how can we tell, except by other evidence, as to when the world of make-believe is mixed up with stern reality. There is no way. It is another case of showing how inherently weak, unreliable and untruthful is the evidence of those who have not reached the age of discretion and full intelligence. And yet, men are sent to the penitentiary and to the electric chair upon the evidence of children. The laws of evidence surely should take greater cognizance of mental age of witnesses with less regard to chronological age, if justice, as dependent upon the accuracy of testimony, is to become more exact.

The last mental characteristic of a child that we will consider is reason. There is an instinctive basis in each person to reason. It is this which in a large measure differenti-

ates the progress of man from animal. But however great an instinctive basis there may be for reason, there can be no reason without the use of the tools acquired only through experience and environment. Thinking requires the full equipment of an individual, and consequently it varies from birth to full maturity, increasing with the added experience of existence. Thus children think less in quantity than do adults. This is caused not only by their having less experience to think with and about, but also because their early activities are largely instinctive adaptations to their environment, in which the use of the senses rather than of the minds is involved. Other reasons for the absence of thought in children may be given. Children are seldom encouraged to think, and are frequently discouraged from so doing. Witness the proverb that children should be seen and not heard. The multitude of questions of the child, unanswered or evasively answered by its parents, is added proof, if any should be needed.

The reasoning process of children is extremely likely to be faulty.¹⁸ They have not acquired sufficient facts with which to reason, and even the ones they have are likely to be inaccurate. Children have no proper relative ideas of the importance of the different things with which they come into contact. Their attention is neither concentrated nor sufficiently sustained to think clearly. Their main state for thought is that of visual imagery, which presents but a crude working tool, and which must produce a crude result.

¹⁸ Norsworthy and Whitley, *Psychology of Childhood*, pp. 176-181.

All of which brings us to the conclusion that children are not to be depended upon for thought or reason.

We will close this section with a short statement of the value of the testimony of a child. It is never safe to depend either on the memory or the reason of a child. Practically the only value in a court of law of any testimony that a child might give, is that which re-enforces or is re-enforced by other testimony. If the opposition falls into the error of depending on the testimony of a child, it must be exposed. This may be done by showing the fallacies of a child's mental processes, by actual concrete illustrations, or by overwhelming evidence contradicting that given by the child.

2. The Woman.

If there are any substantial differences between the psychology of the male and that of the female, it is well for the lawyer to know what they are. Many people seem to think that the mental capacity of women is very different from that of men.¹⁹ The substantial facts available, however, do not seem to support this contention. Thorndike,²⁰ for instance, conducted a series of experiments to determine, if possible, just what sex differences actually existed. The results of his experiments satisfied him that there was little, if any, actual difference between the mental capacity of men and women. He remarks that the most important characteristic of the difference lay in their small amount.

¹⁹ Hans Gross, in *Criminal Psychology*, devotes some sixty-three pages to an interesting discourse on women.

²⁰ Edward S. Thorndike, *Educational Psychology*, pp. 345, 346.

Other psychologists²¹ are of the opinion that sex differences are not nearly as great as popular parlance would have us believe. Gates says that while it may be said at the outset that sex differences do exist, they are less great on the whole than has generally been supposed.

In an article on sex differences by William H. Burnham²² he summarizes his conclusions in substantially the following seven propositions:

1. The studies of the brains of the two sexes give no satisfactory evidence of any significant difference that would affect mental behavior.
2. The psychological studies give no satisfactory evidence of significant psychological differences of a biological character.
3. The various tests of ability to do different kinds of work give little satisfactory evidence that there are distinctly sex differences.
4. The manifold data from observation and the records of the products of human ability and human effort furnish little satisfactory evidence that there are distinctly sex differences in intellectual ability.
5. Studies in regard to fatigue, and the like, apparently show little satisfactory evidence of sex differences.
6. There are certain definite sex differences as regards immunity from disease.
7. There seems to be evidence of certain fundamental sex differences as regards the expression of the social in-

²¹ Arthur I. Gates, *Elementary Psychology*, p. 573; Coleman R. Griffith, *General Introduction to Psychology*, p. 373.

²² William H. Burnham, *Sex Differences in Mental Ability*, in the *Educational Review Magazine*, November, 1921.

instincts, the emotional life, suggestibility and perhaps several other characteristics. Facts which tend to offset these differences are (1) that the differences are quantitative rather than qualitative, (2) that they may be due to differences in physiological age, girls being one and one half or two years older than boys, and (3) to the different education of the sexes.

One of the most important differences to the lawyer is that of suggestibility. We have already stated in a previous chapter that women are more suggestible than men. We considered the nature of suggestion there so we will not add to the subject here.

The most pronounced differences between the sexes is, of course, physiological. In body they are widely different. The male is usually larger and stronger and on the whole less subject to fatigue. The mere matter of fatigue may cause mental differences for we shall note in a later chapter that fatigue may affect mentality to quite a marked extent.

Another difference between men and women, which is important knowledge for the lawyer, is in emotion. Women are the more emotional.²³ That is, they are more subject to emotions and the emotions are more intense. Possibly the so-called "feminine intuition" may have an emotional complex as a basis. Women certainly use their emotions to a larger extent than do men to form or justify judgments. This detracts from their power of unprejudiced reasoning. An emotional appeal might thus have a greater weight with

²³ See Irwin Edman, *Human Traits*, pp. 193, 194.

women in the jury box than would one founded on cold logic. The following table gives the results of certain experiments in sex differences. The percentages mean that the designated proportion of men reach or exceed the average or the median of the women.²⁴

	Per cent.
Reaction time_____	68
Tapping _____	81
Sorting cards (speed)_____	14
Sorting cards (accuracy)_____	44
Thrusting at a target_____	60
Drawing lines _____	72
Threshold of pain_____	46
Threshold of taste_____	34
Threshold of smell_____	43
Lifting weights _____	66
Two-point discrimination _____	18
Memory _____	32
Ingenuity _____	63
Color naming and card sorting_____	24
Cancellation tests_____	33
Spelling _____	33
English (school marks)_____	35
Foreign languages (school marks)_____	40
Immediate memory_____	42
Sensory Threshold_____	43
Retentiveness _____	47
Association (speed and accuracy) _____	48

²⁴ See E. S. Thorndike, *Educational Psychology*, Vol. III, pp. 178-184; D. Starch, *Educational Psychology*, pp. 66-68.

	Per Cent.
General information.....	50
Mathematics (school marks).....	50
School marks (average of all studies).....	50
Discrimination (other than color).....	51
Range of Sensitivity.....	52
History (school marks).....	55
Ingenuity (special tests).....	63
Accuracy of movement (of arm).....	66
Physics and Chemistry (school marks).....	68
Speed of movement (finger and arm).....	71
Interest in persons rather than things.....	15
Emotionality	30
Temperance	30
Impulsiveness	34
Religiousness	36
Sympathy	38
Patience	38
Vanity	40
Slyness	42
Temper	56
Self-consciousness	57
Humor	61
Independence	70

This table gives, in a very condensed form, a comparison of the sex differences. Where the per cent. is 50 the median for men and women is alike. Where the per cent. exceeds 50 the median for men exceeds that for women to the extent of the difference above 50. Where the per cent. is less than

50 the median for women exceeds that for men to the extent of the difference under 50.²⁵

²⁵ The lawyer who is interested in further research into sex differences will find interesting material in the following:

Sex Differences, Biological or Acquired? by Josephine Wimberly, and found in Education Magazine for January, 1923. The en-

tire subject is reviewed. H. B. Thompson, Mental Traits of Sex; Daniel Starch, Educational Psychology; E. S. Thorndike, Educational Psychology, Vol. III. Other material may also be found in the various citations found through the body of this chapter.

PART II

CRIMINAL PSYCHOLOGY

CHAPTER VI

CRIME AND ITS TREATMENT

The basic justification for criminal laws is that the state has certain rights, the infringement of which must be prohibited for the collective or public benefit.¹ This conception has existed in all organized states, both of past and present times,² although there have been widely divergent opinions held as to what acts constituted a public menace, and as to what should be the proper mode of punishment. For illustration, the classification and enumeration of crimes today is far different from that existing in the heyday of Roman influence. In those days, many of our present crimes, such as theft and homicide, were mere civil wrongs, unrecognized by the state, the only cause of action arising being that by the injured party for damages on account of the tort committed.³ However, in archaic times, punishment for those

¹ Thomas Erskine Holland, *Elements of Jurisprudence*, 12th Ed., p. 375.

² Sir Henry Maine, *Ancient Law*, p. 219.

³ Thomas Erskine Holland, *Elements of Jurisprudence*, 12th Ed., pp. 375, 376; Sir Henry Maine, *Ancient Law*, pp. 217-219.

crimes which did exist was unusually severe. Frequently it involved slavery, banishment, or death. The Roman Republic finally abolished the death penalty⁴ only to have it resurrected for a multitude of crimes at a later date.

The criminal is one who has violated a criminal law. He is a creature of law, and would not exist were there no law. Laws are necessary, however, in the regulation of social intercourse, and hence the criminal is a resultant evil.

We are concerned with the mental states and processes which allow or cause a person to commit a crime. It is substantially agreed today that there is no distinctly criminal type, recognizable either by outward physical characteristics or by observation of inner trains of thought.⁵ The most that can be said is that many criminals belong to a class having abnormal minds.⁶ Even here, however, there is not the definiteness that there seems to be, for who is to say as to what standard shall exist for a normal individual. Binet⁷ considered that 65 to 75 per cent. of all people were normal, and measured intelligence upon that basis. Terman, in his revision of the Binet scale, discarded the basing of

⁴ Sir Henry Maine, *Ancient Law*, p. 227.

⁵ A dissenting opinion is found in the *World's Work Magazine*, July, 1924, under the heading, "The Cause of Crime: Defective Brain," in which crime is attributed to emotional irregularities. The article is by French Strother, but the findings are based upon data supplied by Judge Harry Olson, Chief Justice of the Municipal Court of Chicago, and Dr.

William J. Hickson of the Psychopathic Laboratory of the Municipal Court. This article and the two following it in the same magazine are commented upon later in this chapter.

⁶ H. H. Goddard, *Feeble-mindedness*, p. 9; L. M. Terman, *Measurement of Intelligence*, pp. 7-12; Coleman R. Griffith, *General Introduction to Psychology*, p. 405.

⁷ L. M. Terman, *Measurement of Intelligence*, p. 37.

measurements on the percentage of passes. It was the aim of Terman to make the average child of 5 years test exactly at 5, or to make the median mental age coincide with the median chronological age.⁸ With a similar standard in use, Goddard⁹ found that in sixteen correctional institutions the number of those mentally deficient varied all the way from 28 per cent. to 89 per cent. of the inmates. In his opinion from 25 per cent. to 50 per cent. of the people in our prisons are mentally defective and incapable of managing their own affairs with ordinary prudence. If Goddard errs in his figures it is probably on the side of conservatism.

Criminals, then, may be divided into two classes, the normal minded and the abnormal minded. In the first class we find those persons whose abilities permit what we term normal mental processes. In the second class we find those persons in whom these abilities are wholly lacking, or distorted so that an abnormal mind results.

There is possibly a third distinct class which is composed of those criminals who are physically deficient, yet we will not make such a distinction, as many of the physical abnormalities may be regarded merely as bodily accompaniments of feeble-mindedness or as criminal incentives to an otherwise weak mind. Such physical defects as tuberculosis, heart-disease, hernia, defects of vision may be so classified.¹⁰

⁸ L. M. Terman, *Measurement of Intelligence*, pp. 53-56.

⁹ H. H. Goddard, *Feeble-mindedness*, p. 9.

¹⁰ Horatio W. Dresser, *Psychology in Theory and Application*, p. 521. Dr. Dresser has a very interesting yet brief chapter on *Delinquency and Crime*.

Army Group Examination Alpha

Name_____ Age_____ Date_____

School_____ City_____ State_____

In what Country or State Born?_____ Years in U. S._____ Race_____

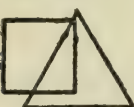
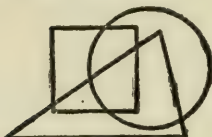
Occupation_____ Monthly Wages_____ Sex_____

Schooling: Grades 1. 2. 3. 4. 5. 6. 7. 8: High or Prep. School, Year
1. 2. 3. 4: College, Year 1. 2. 3. 4.

TEST 1

1. ○ ○ ○ ○ ○

2. ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

3. 4. 

5. ○ ○ ○ Yes No

6. ○ ○ ○ ○ ○

7. A B C D E F G H I J K L M N O P

8. ○ ○ ○ MILITARY GUN CAMP

9. 34-79-56-87-68-25-82-47-27-31-64-93-71-41-52-99

10.

--	--	--	--	--

11.

7F	.	△ 4	○ 3	△ 5A	○ 8	□ 2	△ 6	○ 9B	□ 3
----	---	-----	-----	------	-----	-----	-----	------	-----

12. 1 2 3 4 5 6 7 8 9

Score.

1	
2	
3	
4	
5	
6	
7	
8	
T	

This is Test No. 1 of one of the forms of the Army Alpha Intelligence Test. Various things are required of the subject, such as drawing lines, crossing out things, making marks in certain places, and writing certain things. The other seven tests which comprise the Army Alpha are self-explanatory in the various headings.

Test 2

Get the answers to these examples as quickly as you can.
Use the side of this page to figure on if you need to.

- SAMPLES { 1 How many are 5 men and 10 men? Answer (15)
2 If you walk 4 miles an hour for 3 hours, how far do you walk? Answer (12)
-

- 1 How many are 60 guns and 5 guns?--Answer ()
- 2 If you save \$9 a month for 3 months, how much will you save?-----Answer ()
- 3 If 48 men are divided into squads of 8, how many squads will there be?-----Answer ()
- 4 Mike had 11 cigars. He bought 2 more and then smoked 7. How many cigars did he have left? -----Answer ()
- 5 A company advanced 8 miles and retreated 2 miles. How far was it then from its first position? -----Answer ()
- 6 How many hours will it take a truck to go 42 miles at the rate of 3 miles an hour?--Answer ()
- 7 How many pencils can you buy for 60 cents at the rate of 2 for 5 cents?-----Answer ()
- 8 A regiment marched 40 miles in five days. The first day they marched 9 miles, the second day 6 miles, the third 10 miles, the fourth 6 miles. How many miles did they march the last day?
Answer ()
- 9 If you buy 2 packages of tobacco at 8 cents each and a pipe for 65 cents, how much change should you get from a two-dollar bill?--Answer ()
- 10 If it takes 4 men 3 days to dig a 120-foot drain, how many men are needed to dig it in half a day? -----Answer ()

Test 2, continued

- 11 A dealer bought some mules for \$2,000. He sold them for \$2,400, making \$50 on each mule. How many mules were there?-----Answer ()
- 12 A rectangular bin holds 200 cubic feet of lime. If the bin is 10 feet long and 5 feet wide, how deep is it?-----Answer ()
- 13 A recruit spent one-eighth of his spare change for post cards and twice as much for a box of letter paper, and then had \$1.00 left. How much money did he have at first?-----Answer ()
- 14 If $3\frac{1}{2}$ tons of clover cost \$14, what will $6\frac{1}{2}$ tons cost? -----Answer ()
- 15 A ship has provisions to last her crew of 700 men 2 months. How long would it last 400 men? -----Answer ()
- 16 If an aeroplane goes 250 yards in 10 seconds, how many feet does it go in a fifth of a second? Answer ()
- 17 A U-boat makes 8 miles an hour under water and 20 miles on the surface. How long will it take to cross a 100-mile channel, if it has to go two-fifths of the way under water?_Answer ()
- 18 If 134 squads of men are to dig 3,618 yards of trench, how many yards must be dug by each squad? -----Answer ()
- 19 A certain division contains 5,000 artillery, 15,000 infantry, and 1,000 cavalry. If each branch is expanded proportionately until there are in all 23,100 men, how many will be added to the artillery? -----Answer ()
- 20 A commission house which had already supplied 1,897 barrels of apples to a cantonment delivered the remainder of its stock to 37 mess halls. Of this remainder each mess hall received 54 barrels. What was the total number of barrels supplied? -----Answer ()

Test 3

This is a test of common sense. Below are sixteen questions. Three answers are given to each question. You are to look at the answers carefully; then make a cross in the square before the best answer to each question, as in the sample:

SAMPLE { Why do we use stoves? Because
☐ they look well
☒ they keep us warm
☐ they are black

Here the second answer is the best one and is marked with a cross. Begin with No. 1 and keep on until time is called.

-
- 1 It is wiser to put some money aside and not spend it all, so that you may
☐ prepare for old age or sickness
☐ collect all the different kinds of money
☐ gamble when you wish
 - 2 Shoes are made of leather, because
☐ it is tanned
☐ it is tough, pliable and warm
☐ it can be blackened
 - 3 Why do soldiers wear wrist watches rather than pocket watches?
Because
☐ they keep better time
☐ they are harder to break
☐ they are handier
 - 4 The main reason why stone is used for building purposes is because
☐ it makes a good appearance
☐ it is strong and lasting
☐ it is heavy
 - 5 Why is beef better food than cabbage? Because
☐ it tastes better
☐ it is more nourishing
☐ it is harder to obtain

Test 3, continued

- 6 If some one does you a favor, what should you do?
☐ try to forget it
☐ steal for him if he asks you to
☐ return the favor
- 7 If you do not get a letter from home, which you know was written, it may be because
☐ it was lost in the mails
☐ you forgot to tell your people to write
☐ the postal service has been discontinued
- 8 The main thing the farmers do is to
☐ supply luxuries
☐ make work for the unemployed
☐ feed the nation
- 9 If a man who can't swim should fall into a river, he should
☐ yell for help and try to scramble out
☐ dive to the bottom and crawl out
☐ lie on his back and float
- 10 Glass insulators are used to fasten telegraph wires because
☐ the glass keeps the pole from being burned
☐ the glass keeps the current from escaping
☐ the glass is cheap and attractive
- 11 If your load of coal gets stuck in the mud, what should you do?
☐ leave it there
☐ get more horses or men to pull it out
☐ throw off the load
- 12 Why are criminals locked up?
☐ to protect society
☐ to get even with them
☐ to make them work
- 13 Why should a married man have his life insured? Because
☐ death may come at any time
☐ insurance companies are usually honest
☐ his family will not then suffer if he dies
- 14 In Leap Year February has 29 days because
☐ February is a short month
☐ some people are born on February 29th
☐ otherwise the calendar would not come out right
- 15 If you are held up and robbed in a strange city, you should
☐ apply to the police for help
☐ ask the first man you meet for money to get home
☐ borrow some money at a bank
- 16 Why should we have Congressmen? Because
☐ the people must be ruled
☐ it insures truly representative government
☐ the people are too many to meet and make their laws

Test 4

If the two words of a pair mean the same or nearly the same, draw a line under **same**. If they mean the opposite, or nearly the opposite, draw a line under **opposite**. If you cannot be sure, guess. The two samples are already marked as they should be.

SAMPLES { good—bad _____ same—opposite
 little—small _____ same—opposite

1	no—yes	_____	same—opposite	1
2	day—night	_____	same—opposite	2
3	go—leave	_____	same—opposite	3
4	begin—commence	_____	same—opposite	4
5	bitter—sweet	_____	same—opposite	5
6	assume—suppose	_____	same—opposite	6
7	command—obey	_____	same—opposite	7
8	tease—plague	_____	same—opposite	8
9	diligent—industrious	_____	same—opposite	9
10	corrupt—honest	_____	same—opposite	10
11	toward—from	_____	same—opposite	11
12	masculine—feminine	_____	same—opposite	12
13	complex—simple	_____	same—opposite	13
14	sacred—hallowed	_____	same—opposite	14
15	often—seldom	_____	same—opposite	15
16	ancient—modern	_____	same—opposite	16
17	enormous—gigantic	_____	same—opposite	17
18	confer—grant	_____	same—opposite	18
19	acquire—lose	_____	same—opposite	19
20	compute—calculate	_____	same—opposite	20

Test 4, continued

21	defile—purify	same—opposite	21
22	apprehensive—fearful	same—opposite	22
23	sterile—fertile	same—opposite	23
24	chasm—abyss	same—opposite	24
25	somber—gloomy	same—opposite	25
26	vestige—trace	same—opposite	26
27	vilify—praise	same—opposite	27
28	finite—limited	same—opposite	28
29	contradict—corroborate	same—opposite	29
30	immune—susceptible	same—opposite	30
31	credit—debit	same—opposite	31
32	assiduous—diligent	same—opposite	32
33	transient—permanent	same—opposite	33
34	palliate—mitigate	same—opposite	34
35	execrate—revile	same—opposite	35
36	extinct—extant	same—opposite	36
37	pertinent—relevant	same—opposite	37
38	synchronous—simultaneous	same—opposite	38
39	supercilious—disdainful	same—opposite	39
40	abstruse—recondite	same—opposite	40

Test 5

The words A EATS COW GRASS in that order are mixed up and don't make a sentence; but they would make a sentence if put in the right order: A COW EATS GRASS, and this statement is true.

Again, the words HORSES FEATHERS HAVE ALL would make a sentence if put in the order ALL HORSES HAVE FEATHERS, but this statement is false.

Below are twenty-four mixed-up sentences. Some of them are true and some are false. When I say "go," take these sentences one at a time. Think what each **would** say if the words were straightened out, but don't write them yourself. Then, if what it **would** say is true, draw a line under the word "true"; if what it **would** say is false, draw a line under the word "false." If you can not be sure, guess. The two samples are already marked as they should be. Begin with No. 1 and work right down the page until time is called.

SAMPLES	{ a eats cow grass_____	true__false	
	{ horses feathers have all_____	true__false	
1	oranges yellow are_____	true__false	1
2	hear are with to ears_____	true__false	2
3	noise cannon never make a_____	true__false	3
4	trees in nests build birds_____	true__false	4
5	oil water not and will mix_____	true__false	5
6	bad are shots soldiers all_____	true__false	6
7	fuel wood are coal and for used_____	true__false	7
8	moon earth the only from feet twen- ty the is_____	true__false	8

Test 5, continued

9	to life water is necessary_____	true__false	9
10	are clothes all made cotton of_____	true__false	10
11	horses automobile an are than slower__	true__false	11
12	tropics is in the produced rubber_____	true__false	12
13	leaves the trees in lose their fall_____	true__false	13
14	place pole is north comfortable a the__	true__false	14
15	sand of made bread powder and is____	true__false	15
16	sails is steamboat usually by propelled a _____	true__false	16
17	is the salty in water all lakes_____	true__false	17
18	usually judge can we actions man his by a _____	true__false	18
19	men misfortune have good never_____	true__false	19
20	tools valuable is for sharp making steel	true__false	20
21	due sometimes calamities are accident to _____	true__false	21
22	forget trifling friends grievances never true__false		22
23	feeling is of painful exaltation the____	true__false	23
24	begin a and apple acorn ant words with the _____	true__false	24

Test 6

SAMPLES	2	4	6	8	10	12	14	16
	9	8	7	6	5	4	3	2
	2	2	3	3	4	4	5	5
	1	7	2	7	3	7	4	7

Look at each row of numbers below, and on the two dotted lines write two numbers that should come next.

3	4	5	6	7	8	-----	-----
8	7	6	5	4	3	-----	-----
10	15	20	25	30	35	-----	-----
9	9	7	7	5	5	-----	-----
3	6	9	12	15	18	-----	-----
8	1	6	1	4	1	-----	-----
5	9	13	17	21	25	-----	-----
8	9	12	13	16	17	-----	-----
27	27	23	23	19	19	-----	-----
1	2	4	8	16	32	-----	-----
19	16	14	11	9	6	-----	-----
11	13	12	14	13	15	-----	-----
2	3	5	8	12	17	-----	-----
18	14	17	13	16	12	-----	-----
29	28	26	23	19	14	-----	-----
20	17	15	14	11	9	-----	-----
81	27	9	3	1	$\frac{1}{3}$	-----	-----
1	4	9	16	25	36	-----	-----
16	17	15	18	14	19	-----	-----
3	6	8	16	18	36	-----	-----

Test 7

SAMPLES { sky—blue :: grass—table green warm big
 fish—swims :: man—paper time walks girl
 day—night :: white—red black clear pure

In each of the lines below, the first two words are related to each other in some way. What you are to do in each line is to see what relation is between the first two words, and underline the word in heavy type that is related in the same way to the third word. Begin with No. 1 and mark as many sets as you can before time is called.

-
- | | | | | | | |
|----|-------------------------------------|-------------|-----------|-----------|-------|----|
| 1 | shoe—foot :: hat—kitten | head | knife | penny | _____ | 1 |
| 2 | pup—dog :: lamb—red | door | sheep | book | _____ | 2 |
| 3 | spring—summer :: autumn—winter | warm | harvest | rise | --- | 3 |
| 4 | devil—angel :: bad—mean | disobedient | defamed | good | ---- | 4 |
| 5 | finger—hand :: toe—body | foot | skin | nail | ----- | 5 |
| 6 | legs—frog :: wings—eat | swim | bird | nest | ----- | 6 |
| 7 | chew—teeth :: smell—sweet | stink | odor | nose | ----- | 7 |
| 8 | lion—roar :: dog—drive | pony | bark | harness | ----- | 8 |
| 9 | cat—tiger :: dog—wolf | bark | bite | snap | ----- | 9 |
| 10 | good—bad :: long—tall | big | snake | short | ----- | 10 |
| 11 | giant—large :: dwarf—jungle | small | beard | ugly | ----- | 11 |
| 12 | winter—season :: January—February | day | month | Christmas | ----- | 12 |
| 13 | skating—winter :: swimming—diving | floating | hole | summer | ----- | 13 |
| 14 | blonde—light :: brunette—dark | hair | brilliant | blonde | ----- | 14 |
| 15 | love—friend :: hate—malice | saint | enemy | dislike | ----- | 15 |
| 16 | egg—bird :: seed—grow | plant | crack | germinate | ----- | 16 |
| 17 | dig—trench :: build—run | house | spade | bullet | ----- | 17 |
| 18 | agree—quarrel :: friend—comrade | need | mother | enemy | --- | 18 |
| 19 | palace—king :: hut—peasant | cottage | farm | city | ----- | 19 |
| 20 | cloud—burst—shower :: cyclone—bath | breeze | destroy | West | ----- | 20 |
| 21 | Washington—Adams :: first—president | second | last | Bryan | ----- | 21 |
| 22 | parents—command :: children—men | shall | women | obey | ---- | 22 |
| 23 | diamond—rare :: iron—common | silver | ore | steel | ----- | 23 |
| 24 | yes—affirmative :: no—think | knowledge | yes | negative | ----- | 24 |
| 25 | hour—day :: day—night | week | hour | noon | ----- | 25 |

Test 7, continued

26	eye—head :: window—key	floor	room	door	-----	26
27	clothes—man :: hair—horse	comb	beard	hat	-----	27
28	draw—picture :: make—destroy	table	break	hard	-----	28
29	automobile—wagon :: motorcycle—ride	speed	bicycle	car	-----	29
30	granary—wheat :: library—read	books	paper	chairs	-----	30
31	Caucasian—English :: Mongolian—Chinese	Indian	negro			
		yellow	-----			31
32	Indiana—United States :: part—hair	China	Ohio	whole	---	32
33	esteem—despise :: friends—Quakers	enemies	lovers	men	---	33
34	abide—stay :: depart—come	hence	leave	late	-----	34
35	abundant—scarce :: cheap—buy	costly	bargain	nasty	----	35
36	whale—large :: thunder—loud	rain	lightning	kill	-----	36
37	reward—hero :: punish—God	everlasting	pain	traitor	----	37
38	music—soothing :: noise—hear	distracting	sound	report	---	38
39	book—writer :: statue—sculptor	liberty	picture	state	----	39
40	wound—pain :: health—sickness	disease	exhilaration	doctor		40

Test 8

Notice the sample sentence:

People hear with the eyes ears nose mouth

The correct word is ears, because it makes the truest sentence.

In each of the sentences below you have four choices for the last word. Only one of them is correct. In each sentence draw a line under the one of these four words which makes the truest sentence. If you can not be sure, guess. The two samples are already marked as they should be.

SAMPLES	{	People hear with the eyes <u>ears</u> nose mouth	
		France is in <u>Europe</u> Asia Africa Australia	
1		The apple grows on a shrub vine bush tree-----	1
2		Five hundred is played with rackets pins cards dice-----	2
3		The Percheron is a kind of goat horse cow sheep-----	3
4		The most prominent industry of Gloucester is fishing packing brewing automobiles-----	4
5		Sapphires are usually blue red green yellow-----	5
6		The Rhode Island Red is a kind of horse granite cattle fowl-----	6
7		Christie Mathewson is famous as a writer artist baseball player comedian-----	7
8		Revolvers are made by Swift & Co. Smith & Wesson W. L. Douglas B. T. Babbitt-----	8
9		Carrie Nation is known as a singer temperance agitator suffragist nurse-----	9
10		"There's a reason" is an "ad" for a drink revolver flour cleanser-----	10
11		Artichoke is a kind of hay corn vegetable fodder-----	11
12		Chard is a fish lizard vegetable snake-----	12
13		Cornell University is at Ithaca Cambridge Annapolis New Haven-----	13
14		Buenos Aires is a city of Spain Brazil Portugal Argentina	14
15		Ivory is obtained from elephants mines oysters reefs----	15
16		Alfred Noyes is famous as a painter poet musician sculptor-----	16
17		The armadillo is a kind of ornamental shrub animal musical instrument dagger-----	17
18		The tendon of Achilles is in the heel head shoulder abdomen-----	18
19		Crisco is a patent medicine disinfectant tooth-paste food product-----	19
20		An aspen is a machine fabric tree drink-----	20

Test 8, continued.

21	The sabre is a kind of musket sword cannon pistol-----	21
22	The mimeograph is a kind of typewriter copying machine phonograph pencil -----	22
23	Maroon is a food fabric drink color -----	23
24	The clarionet is used in music stenography book-binding lithography -----	24
25	Denim is a dance food fabric drink -----	25
26	The author of "Huckleberry Finn" is Poe Mark Twain Stevenson Hawthorne -----	26
27	Faraday was most famous in literature war religion science -----	27
28	Air and gasolene are mixed in the accelerator carburetor gear case differential -----	28
29	The Brooklyn Nationals are called the Giants Orioles Superbas Indians -----	29
30	Pasteur is most famous in politics literature war science	30
31	Becky Sharp appears in Vanity Fair Romola The Christmas Carol Henry IV-----	31
32	The number of a Kaffir's legs is two four six eight-----	32
33	Habeas corpus is a term used in medicine law theology pedagogy -----	33
34	Ensilage is a term used in fishing athletics farming hunting -----	34
35	The forward pass is used in tennis hockey football golf-	35
36	General Lee surrendered at Appomattox in 1812 1865 1886 1832 -----	36
37	The watt is used in measuring wind power rainfall water power electricity -----	37
38	The Pierce Arrow car is made in Buffalo Detroit Toledo Flint -----	38
39	Napoleon defeated the Austrians at Friedland Wagram Waterloo Leipzig -----	39
40	An irregular four-sided figure is called a scholium triangle trapezium pentagon -----	40

We shall first consider the case of the abnormal minded criminal. Here we are partially at a loss, and must necessarily wander about somewhat helplessly. With a normal minded individual we can at least fairly accurately determine what he will do under given conditions of environment, but not so with the abnormal. This is one of the criteria which shows abnormality. Then there are so many shades, degrees and types of abnormality running the gamut from the extreme idiot to the high moron that a classification of individuals according to specific mental processes and reactions is almost impossible. The most that we can do at the present time is to note some of the causes and some of their general manifestations.

In a broad sense abnormality results from two causes.¹¹ In the first place, a normal mentality may not have developed at all due to some failure in heredity. This condition is prominent in those who have no actual mental disease, but who simply lack intelligence. In the second place, an individual may have developed a perfectly normal mentality, and then have had it impaired by some accident, dissipation, habit or disease. As regards these actual organic troubles, very little need be said here. They are usually recognized as such in a criminal, and the case immediately becomes one for the physician, in which the lawyer plays only second role. For an extensive classification of organic mental diseases one should refer to an authority on that subject.¹² In Hunter¹³ "General Psychology" he treats of

¹¹ Walter S. Hunter, *General Psychology*, Rev. Ed., p. 77.

A. White, *Outlines of Psychiatry*, 5th Ed.

¹² A. Church and F. Peterson, *Nervous and Mental Diseases*; W.

¹³ W. S. Hunter, *General Psychology*, Rev. Ed., pp. 79-90.

four in some detail. These are paresis, paranoia, multiple personality and hysteria. One can not read the symptoms without realizing how likely a mentally diseased person is to commit a crime. In paranoia, for illustration, the unfortunate patient is the victim of systematized delusions. He may feel that every one is persecuting him, or that everyone is in love with him. Reactions to such stimuli lead to extreme consequences to himself and to those around him.

The cases of criminality, however, which involve an actual mental disease or organic disturbance are not the most important class of cases nor the largest. The largest class and the one recognized with the most difficulty is that class of abnormals in which no specific disease is present, but where there is only an inherited lack of normal general intelligence. With this latter class, a large part of our penal institutions are filled. It is with this class that psychology offers the greatest value both in the determination of intelligence, and in the determination of moral responsibility. In this respect, our system of criminal laws and procedure have not developed apace with the proved facts of the science of psychology. Too long have we been content with many large generalizations regarding responsibility for crime. At the present time it is possible to determine to a reasonably accurate degree exact intelligence in years and months. Thus, entirely disregarding the chronological age, upon which responsibility should not necessarily rest, we can determine the mental age, upon which responsibility should probably rest. This proposed criterion for the responsibility of acts does not apply to those cases in which actual mental disease or impairment is present. It is limited

to those criminals who do not come within these classes. That moral responsibility for crime should rest upon the question of mental condition rather than upon chronological age is readily seen when we consider that our whole system of criminal procedure is based upon the assumption that the will is free to act as it chooses¹⁴ and is not fated or preordained to an invariable path of conduct. As the actions of the will depend, however, upon mentality, is it not logical then to determine responsibility for crime by means of some measure of mentality such as general intelligence? It seems so. With an hour of time, any skilled tester, with any one of a number of tests, but particularly with the Binet test¹⁵ can fairly accurately determine the intelligence of a person. By checking the results of two different tests, a still more reliable result can be obtained.¹⁶

The responsibility for crime as defined by the law was probably intended to coincide with the real mental or moral responsibility, and yet the two are widely apart. The many variations in intelligence, which there are, make it impossible to lay down any fixed rules as to responsibility. Here is one place in which generalization should be followed by individualization. Some of the rules regarding responsibility have doubtless been based on practical reasons. Such an illustration is the presumption that everyone knows the

¹⁴ See Coleman R. Griffith, *General Introduction to Psychology*, pp. 405, 406.

¹⁵ The Stanford Revision of the Binet-Simon Intelligence Test as stated by L. M. Terman in *Measurement of Intelligence*.

¹⁶ An excellent survey of intelligence testing as regards both means and results is found in *Intelligence Testing Methods and Results*, by Rudolf Pintner.

law, and is therefore responsible for the violations of all laws, known and unknown. This is fictitious in the extreme because moral and mental responsibility, aside from legal, are based upon conscious violation. As it is impossible, however, to determine whether there was or was not knowledge of the law in question, and as it would be unwise to allow a defense of ignorance to be interposed, it has been laid down that everyone is presumed responsible for acts, even though committed as a result of ignorance of the law. Even here some technical distinction might be drawn to avoid clouding the subject of responsibility. Would it not be better to say that responsibility for crime is based upon knowledge of the law, but where ignorance exists, the punishment is for the ignorance, and not for the violation of an unknown law?

It is unfortunate that at the present time those varying degrees of abnormality, as expressed by low intelligence, are not clearly recognized as such in the courts, unless existing to the degree of imbecility, insanity or idiocy. There is little provision made for their proper use. Our juries are manifestly ignorant of the proper methods of interpretation. Our punishments are not responsive to the conditions. The lawyer is thereby handicapped in the administration of justice, especially as there is much popular talk that any attempt to show lack of mental responsibility is a mere attempt to allow a guilty man to escape the penalties for his wrongdoing. One of the most sensational cases of recent years is the famous Loeb and Leopold case, in which their attorney, Clarence Darrow, made out for them so strong a case of emotional insanity as to save them from the death pen-

alty, even though all of the parties admitted that the accused possessed high intelligence, good educations and had no organic mental disease. Whether the decision was sound psychology and law still remains a moot question in the minds of many. In the not far distant future we shall see many more doctrines of psychology find their way into the court room. It is not improbable that the courts will require an examination of intelligence as an introductory measure to every person brought before it in a criminal capacity.

We have stated previously in this chapter that both normal minded and abnormal minded persons violate the criminal laws. We have just completed a discussion of the abnormal minded class. Now we shall confine our attention to the criminal who possesses a normal mind.

Intelligence Grade	Definition	Score (Alpha)	Score (Beta)
A	Very Superior	135-212	100-118
B	Superior	105-134	90-99
C+	High Average	75-104	80-89
C	Average	45-74	65-79
C—	Low Average	25-44	45-64
D	Inferior	15-24	20-44
D—	Very Inferior	0-14	0-19

This table shows the method of grading and the interpretation of the Alpha and Beta intelligence tests as used by the military forces during the World War.

It was stated at the beginning of this chapter that criminal laws hold as their ultimate goal of attainment the preservation of state rights for the public welfare. That is, the criminal laws are for the public benefit, even if they may tramp on the individual's toes and hinder the individual's actions. Not so, however, are the directing forces of the innate, inherited, instinctive tendencies of each indi-

vidual. These tendencies serve only to protect and to develop and to give pleasant feelings to the individual regardless of the state. These tendencies consider only the welfare of others when such action coincides with the instinctive tendencies. Thus there is more or less of a conflict going on between the criminal laws on the one hand and the individual tendencies on the other. Because of the self-serving nature of these tendencies, some people have gone so far as to say that instinctively every man is a criminal. As to certain instincts, this is undoubtedly true. Take for example, the instinct of hunger. The criminal laws state that a man should not steal under any conditions. The instinct of hunger is so strong, however, that a man will not only steal, but murder, and if necessary eat his fellow man to satisfy the irresistible instinct. It is instinctive to fight, and men will be eternally driven to fight, regardless of any criminal law on the subject. Then again it is instinctive to collect things, to hate, to fear, etc. Some years ago there was a normal woman arrested for shoplifting. It developed that the woman was in entirely comfortable circumstances, that she had the means to purchase what she desired, but that the taking was simply an unmodified expression of the collecting or hoarding instinct. In your youthful days did not the peaches in another's peach orchard taste better than the peaches you had at home? Some of the other instincts, however, are more in the nature of social instincts, and would seem to offset some of the criminal tendencies of the aforementioned ones. The parental instinct, love, the gregarious instinct, modesty, shyness, sociability, and sympathy are examples of the latter class. Even these can never offset such a preservative instinct as hunger.

While instincts can not be easily or quickly eradicated, they can fortunately be modified or developed.¹⁷ The whole progress of civilization has been due to the adaptation of instincts to the ends of organized social existence. Here the forces of environment find their greatest usefulness. Man is ordained through heredity with many instincts and tendencies, some of which may be good, and some of which may be bad.¹⁸ Upon environment falls the task of developing the good ones along the proper paths, and of stifling the harmful ones or harmful uses of the good ones. By environment, of course, we mean all those influences, either of individuals or of objects, which surround the individual during life.

Assuming then that the inherited tendencies are the basic causes of action, and further assuming that these basic tendencies may be modified either into good or bad channels, it follows that any refraction of a criminal law by an individual is the direct result of an environment which has failed to modify a nonsocial instinct, or has allowed an instinct to develop in a harmful way. There is one notable exception. This is in the case of the instincts which fight for the very existence, such as the hunger instinct. Environment may modify hunger so that the individual will postpone a criminal action to appease it, but no amount of environmental training will so modify a normal person as to permit him to starve without first making a struggle to prevent the lapse of life.

¹⁷ Howard C. Warren, *Elements of Human Psychology*, pp. 236, 237; Walter S. Hunter, *General Psychology*, Rev. Ed., pp. 185-187.

¹⁸ I. Edman, *Human Traits*, pp. 19-22.

Let us revert for a moment to the question of responsibility for criminal acts. Legal responsibility differs from the mental and moral. Legally a man is held responsible for theft to satisfy the instinct of hunger. Morally he may not be. The will is not free to act as it chooses when instincts are involved, as one of the characteristics of instincts is that they are without conscious direction and are in the nature of reflex forces. Normally, then, there is no moral responsibility for an instinctive act, as there is no direct using of the will to commit the act. But in such a case, the will has failed to do its social duty in not modifying the instinct prior to the commission of the act. The responsibility for the commission of the act should not be laid on the will for the commission of the act, but should be laid on the will for its failure to previously modify the instincts so as to eliminate the possibility of the commission of the act. In the final analysis the responsibility rests upon society for not preventing the growth and development of any criminal tendency. The commission then of a crime by any normal man is thus a punishment inflicted upon society for her neglect to train the criminal during his formative years.

Under present systems of criminal administration it would be futile to set up as a defense to a criminal charge, the evidence that it was an unwilled instinct which caused the crime. Instincts have at present no established place in a court of law. The impelling force of an instinct would not be believed to be a scintilla of evidence showing any lack of criminal intent, and yet such is really the case. If our present systems of punishment are desirable, this is

probably a very wise and practical provision, although surely not a true one, for otherwise punishment might be avoided for acts which it is now deemed wise to punish in certain manners.

So far in this chapter we have been considering the mind of the criminal. Now let us consider the mind of the state or of society, which determines what acts shall be criminal, which makes the criminal laws, and which punishes the person who violates its mandates. Let us not only consider the means, but let us consider the ends which are attempted to be served.

Many theories have been advanced as to the why and wherefore of criminal jurisprudence. The basis is, of course, an inherent ethical problem attempted to be worked out through the instrumentality of criminal laws.

Upon not all phases of human conduct has it been deemed necessary to enact governing regulations. Most, in fact, of the questions of conduct are still matters for the individual to solve in his own manner. Some rules of conduct, mainly in the nature of prohibition of certain actions, have been formulated by the law making authorities in the belief that the social good requires them. It is impossible to follow the social mind as it has frequently changed its conceptions regarding what are criminal acts. Many factors enter into the problem, such, for example, as religion, density of population, characteristics of climate, soil and many others. The sovereign power of a state, which is the people in the case of a democracy, at any particular time determines the rights of the state, the infringement of which must be prevented by law.

Where the criminal laws stipulate that a state right has been infringed, there is usually added a provision for the punishment of the offender. Black¹⁹ says that punishment is any pain, penalty, suffering or confinement inflicted upon a person by the authority of the law and the judgment and sentence of a court, for some crime or offense committed by him, or his omission of a duty enjoined by law. A shorter definition of punishment would seem to the author to be that punishment is the means by which the state endeavors to compel the recognition of its rights.

Many viewpoints have been held as to the proper object of punishment in its contact with the criminal offender.²⁰ The three main viewpoints seem to be the retributive, the reformatory and the preventive.

Those who believe in the retributive viewpoint of punishment would seem to found their idea of justice upon the basis that one should suffer in the same measure as he has caused the state to suffer. "An eye for an eye, and a tooth for a tooth" should be their slogan. It is a doctrine of retaliation and of revenge. McDougall believes that the idea of punishment for retribution is founded upon the idea that the will is free.²¹ Under the doctrine of free will, future human actions are not determined by the present. Thus punishment can not be administered with the idea of future reformation or prevention, but only with the present idea

¹⁹ Henry Campbell Black, *Law Dictionary*, 2nd Ed., p. 966.

Legal Evidence, 2nd Ed., by G. F. Arnold, pp. 521-527.

²⁰ A very interesting discussion of the objects of punishment is found in *Psychology Applied to*

²¹ William McDougall, *Introduction to Social Psychology*, 4th Ed., pp. 13, 14, 232.

of retaliation. McDougall, however, does not hold to the idea of punishment as a means of retribution. He believes that the objects of punishment are to deter the wrongdoer and to modify his nature.

The reformatory viewpoint is a more idealistic conception than the retributive viewpoint, and really aims at a more desirable, although less attainable, result. The retributive viewpoint is satisfied when retaliation takes place. The reformatory viewpoint is not satisfied until the criminal is induced to mend his ways to conform with law and order. According to the reformatory idea, it is impossible to protect the rights of the state or of society without reforming the criminal. So long as the criminal remains a criminal, even though retribution has taken place, the state is unprotected. There is considerable logic in this viewpoint. The main difficulty with it seems to be in devising proper means to reform the criminal. Remember that criminals are not all alike. Some are mentally normal and some are mentally abnormal. The class of mentally abnormal may be further divided into those possessing actual mental disease and into those of low intelligence. When we recall these classifications we can, at least partially, realize some of the complications to be met by any scheme of reformation.

The preventive viewpoint believes that the object of punishment is to deter future criminal acts. It is a case of the belief that the fear of future punishment will be sufficiently strong to overcome a present criminal impulse. A very interesting quotation from Herbert Spencer's *Social Sta-*

tics is given by Arnold.²² We will repeat part of it here. "Nay even a distinct foresight of evil consequences will not restrain when strong passions are at work. How else does it happen that men will get drunk though they know drunkenness will entail on them suffering and disgrace, and (as with the poor) even starvation? How else is it that medical students who know the disease brought on by dissolute living better than other young men, are just as reckless and even more reckless? How else is it that the London thief who has been at the treadmill a dozen times, will steal again as soon as he is at liberty? * * * If the hopes of eternal happiness and terror of eternal damnation fail to make human beings virtuous, it is hardly likely that the commendations and reproofs of the schoolmaster will succeed. There is, in fact, a quite sufficient reason for failure—no less a reason than the impossibility of the task. The expectation that crime may presently be cured whether by State education or the Silent system or the separate system, or any other system, is one of those utopianisms fallen into by people who pride themselves on being practical. Crime is incurable, save by that gradual process of adaptation to the social state which humanity is undergoing."

The preventive viewpoint is neither wholly good nor wholly bad. We know it is not wholly sound in its logic, because we have been punishing crime for a long while, and we know that crime is still with us. We have grounds, however, for believing that punishment may act as a deter-

²² G. F. Arnold, *Psychology Applied to Legal Evidence*, 2nd Ed., pp. 524, 525.

ent force by educating the individual. We know that the future behavior of an individual may be modified by the effects of an act. It is a definite law of psychology that individuals do not tend to repeat those reactions which are accompanied or followed by an annoying state of affairs.²³ We further know that the more quickly the annoying state of affairs follows the action the more effective it will be to prevent a repetition of the act. We also know that the more intense the annoying state of affairs the greater the effect as a deterrent.²⁴

Let us not, however, in our consideration of these viewpoints of the object of punishment, be misled into believing that these, or any one of them, are the stated legal viewpoint of punishment. The law prescribes the punishment for the violation of the state's rights. The protection of the state's rights are its only concern. If the punishment, in best protecting the rights of the state, reforms the individual or deters future crime so much the better. The men who enacted our criminal laws may have each had in mind some particular object of the punishment prescribed, but when the laws became enacted, no objects of punishment were prescribed, only the quantity and quality. We may, however, in some cases infer with considerable certainty as to what objects of punishment were intended by the penalty. One of the most obvious illustrations of this character is that of peace proceedings, in which the person complained about is required to give a peace bond conditioned that he will keep the peace. The present giving of the bond is a

²³ Arthur I. Gates, *Psychology for Students of Education*, p. 230.

²⁴ Arthur I. Gates, *Psychology for Students of Education*, p. 234.

OCCUPATIONAL INTELLIGENCE STANDARDS



Bar shows range of middle 50 per cent. The vertical cross bar shows position of median. The figure is based on data for approximately 36,500 men. Numbers at extreme left are key numbers of occupations. Data taken from soldiers' Qualification Cards.

punishment which is required as a deterrent to future violations of the law. In fact, the chapter in the Ohio General Code under which are placed peace proceedings, is entitled "Proceedings to Prevent or Detect Crime."

Let us pass on from a consideration of the objects of punishment to the means thereof. The three most common means of punishment are fine, imprisonment, and death. We should be greatly interested in analyzing these means to observe whether they really accomplish the purposes for which they were intended, and whether they are the most efficient obtainable.

The retributive object of punishment is the only one we can definitely say can be fully accomplished in any case, whether the punishment be fine, imprisonment or death. This is because the only object of retribution is to see that the individual suffers in the prescribed measure. It is not concerned with the mental attitude of the criminal, or with any reactions which may take place thereafter. Its only object is immediate penalty to the individual for his wrongdoing. That the result of retributive punishment in some cases may blend into and be the same as the results of reformatory or preventive punishment, we are not concerned with at this point. As to retributive punishment, we may conclude that any penalty whether fine, imprisonment or death, so long as it is considered equal in measure to the crime committed, is satisfactory punishment from the retributive viewpoint. Nothing else is required.

When, however, we consider fine, imprisonment and death from the reformatory or preventive viewpoint, we are con-

cerned with other factors besides merely seeing that the criminal receives the punishment.

In the case of the reformatory viewpoint, we are concerned with the effect which the punishment makes upon the criminal. We desire the punishment to aid in correcting the character and habits of the criminal so that thereafter he will be a law abiding citizen. In other words, we desire the punishment to have a certain effect upon the mind and behavior of the criminal. We want the result to be a rectification of tendencies.

In so far as the mentally sound criminal is concerned, it would seem that a fine or imprisonment might tend to reform him, for we know that a person does not tend to repeat those actions which are followed by unpleasant conditions.

The death penalty has never reformed any criminal, in so far as our limited faculties have enabled us to discover. When we consider punishment from the reformatory viewpoint, we must also consider that the punishment may simply harden the individual, and not mould him as desired. This is particularly true with punishment where the environment is usually not of the reforming kind. We must remember that if the fine or imprisonment is to have the greatest effect for reformatory purposes, it must follow closely the crime, and be of a high degree of intensity.²⁵ The law is weak in procedure from the standpoint of reformation.

So much for the reformatory viewpoint in connection with the mentally normal criminal. We have seen, however,

²⁵ Arthur I. Gates, *Psychology for Students of Education*, p. 234.

that a large number of criminals are not mentally sound, having either organic mental disease or low intelligence. In these cases what effect can punishment have as a reforming agent?

It is the author's belief, in as much as reformation of the criminal involves a mental change or education of the criminal, that where normal mentality does not exist, the degree of otherwise reformatory influence which there might have been, lessens in at least the same proportion as the individual varies from the normal. Thus the author believes that the more abnormal the criminal, the less chance of reformation there is.

Let us now consider fine, imprisonment and death from the preventive viewpoint. If we are considering preventing future criminal acts by the criminal in question, without regard to reformation, certainly a fine does not prevent the possibility of the commission of future crimes. Imprisonment would prevent additional crimes so long as the imprisonment lasted, and death would absolutely eliminate all further question. The preventive viewpoint does not, however, primarily concern itself with the criminal who is in custody because of a crime already committed. The viewpoint looks to the punishment of the criminal as an influence to operate as a deterring force upon prospective criminals. This leads us to the point where we must consider the person who may commit a crime at some future time. By the law of averages, we may, I think, safely conclude that the criminals of the future will bear the same proportion to those of the present and past in regard to normal and abnormal mental condition. Thus we must take

for granted that a large number of those who will commit crimes will be mentally abnormal. Let us quote from Munsterberg²⁶ in regard to the deterring force of punishment. He says:

"The hope of escaping justice in the concrete case will easily have a stronger feeling tone than the opposing fear of the abstract general law. The strength of the forbidden desire will narrow the circle of associations and eliminate the idea of the probable consequences. The stupid mind will not link the correct expectations, the slow mind will bring the check too late when the deed is done, the vehement mind will overrule the energies of inhibition, the emotional mind will be more moved by the anticipated immediate pleasure than by the thought of a later suffering. And all this will be reinforced if overstrain has destroyed the nervous balance, or if stimulants have smoothed the path of motor discharge. If the severity of cruel punishments has brutalized the mind, the threat will be as ineffective as if the mildness of the punishment had reduced its pain. And, worst of all, this fear will be ruled out if the mind develops in an atmosphere of crime where the child hears of the criminal as hero and looks at jail as an ordinary affair, troublesome only as most factors in his slum life are troublesome; or if the anarchy of corruption or class justice, of reckless legislation or public indifference to law defeats the inhibiting counter idea of punishment and deprives it of its emotional strength. The system of punish-

²⁶ Hugo Munsterberg, *On the Witness Stand*, pp. 258-260.

ment will be the more disappointing the more mechanical it is in its application."

Because, however, all of the objects and means of punishment have weaknesses which seem irremedial, we must not draw the conclusion that punishment for crime is futile. It is efficacious in the large majority of cases. The protection to society which punishment does not offer concerns the exceptional individual, and not the average. Almost all of the people will refrain from doing an act which they might do were it not criminal.

Full and complete protection and preservation of the rights of the state and of society demand that all crime stop. This would require that present criminals must be removed or corrected, and that no criminals be allowed to develop. We feel reasonably sure, however, that such condition will never exist save possibly in Utopia.

What seems to the author to be as sane a method for criminal procedure as the facts warrant, is the following outline. In reading it, it is necessary to keep in mind the facts already set forth in this chapter.

1. Promptness of action should by all means take place.
2. It would seem wise that there should be some accurate trial or investigation to determine whether or not the crime was committed by the person charged therewith.
3. After the offense has been definitely fixed on the person in question, the next step would be to have an examination by qualified physicians and psychologists to determine whether the accused is suffering from any mental disease or any physical defect which would act as an incentive to a weak mind.

4. Following this examination, there should be a further examination to determine the degree of intelligence of the accused.

Occupation	Wadsworth Study		Devons Study	
	Median Weighted Alpha	Rank	Median Weighted Alpha	Rank
Civil Engineer -----	274	1	250	3.5
Lawyer and Teacher ---	252	2	262	1
Student -----	239	3	266	5
Dentist -----	229	4	195	7
Draftsman -----	206	5	231	6
Chemist -----	205	6	253	2
Mechanical Engineer ---	195	7	250	3.5
Druggist -----	192	8	174	9
Clerk -----	175	9	186	8
Salesman -----	170	10	172	10
Gas Engine Mechanic ---	129	11	147	14
Auto Mechanic -----	122	12.5	146	15
Electrician -----	122	12.5	162	12.5
Musician -----	119	14.5	169	11
Policeman -----	119	14.5	139	16
Butcher -----	118	16	111	23
Plumber -----	117	17	129	18
Blacksmith -----	109	18	87	28
Machinist -----	107	19	136	17
Baker and Cook -----	106	20	93	26
Chauffeur -----	104	21	120	20
Painter -----	103	22	115	21.5
Printer -----	99	23	162	12.5
Lumberman -----	96	24	115	21.5
Carpenter -----	91	25	127	19
Farmer -----	73	26	97	24
Teamster -----	72	27	95	25
Barber -----	65	28	87	28
Laborer -----	63	29	87	28

A Study of Intelligence by Occupations made at Camp Wadsworth and Camp Devons during the World War. Note the position of lawyers. (From Memoirs of National Academy of Science.)

5. If we found that the accused had a mental disease which caused the crime, or a physical defect acting as an incentive, we must employ all the means available to cure it.

If it can not be cured, the only complete protection to society is in the permanent confinement of the individual regardless of the crime committed.

6. If we found by examination that the accused had no specific mental disease, but had a low intelligence which caused the crime, what procedure shall we follow? Intelligence is a thing which seems to depend entirely on heredity as a basis. It can be injured through factors in the environment, but it can not be made to develop beyond the normal rate which covers a period of years from birth until the age of approximately sixteen is reached. If the intelligence is low, science knows of no way in which it may be developed to normal. If the intelligence is so low as to make the person incapable of being led into a life of lawfulness, then permanent confinement is the only solution. In some cases where the intelligence is not too far below normal, the person can be trained to do manual work well, and can thus be given a peaceful occupation.

7. If the examinations showed that the accused had no mental disease and was of normal intelligence, then we know that the environment and not the heredity caused the crime. The professional sociologist would seem to be of use here to determine as to what factors in environment were at fault. It is a difficult problem, but we must solve it, if we would have the success which we want.

8. When we have found what factors in environment have caused the crime, we must remedy these factors so far as the individual is concerned in order to prevent future crimes by the same individual. It does not seem that a penitentiary is the proper place to correct such faults.

Proper education, using the word in a very broad manner, seems to offer some solution. Persons can be trained to live in certain environments and to have certain habits. We must realize that the individual is not entirely responsible for his environment. Without his wishes and possibly against his earnest efforts, he may be compelled to live in an environment which would not be conducive to a lawful life. Correction of environment for the eradication of crime assumes a partial correction of social conditions, as well as a change in the environment of any individual so that that individual will not commit further crimes. If the environment remains there may be others who may become victims of its pernicious influence.

These eight suggestions may seem quite visionary and impracticable. It is true that there is much experimentation yet to be done. However, any system which seems to offer some improvement over the present one should not be discarded without being considered carefully.

The most hopeful work now being done for society to eliminate the criminal is that which is being done by the psychiatric clinics now operating in many parts of our country usually in connection with juvenile and domestic relations courts.

Here, in these clinics established for the treatment and prevention of juvenile delinquency, criminal tendencies are studied at their inception with a view to learning how to prevent the development of these tendencies and how to treat and correct them during the formative years of childhood before it is too late.

The lawyer who would delve into this branch of psychology will find many interesting reports of actual work done. In the *Journal of Criminal Law and Criminology* for November, 1923, there is an excellent article prepared by Victor V. Anderson upon the subject of the psychiatric clinic. We will give two quotations from this article, the first being a statement of the methods employed by a clinic, and the second as to the actual recommendations in an illustrative case.

Methods Employed.

"Each case received an initial study covering from two to five days. (This does not mean that the entire clinic group was employed from two to five days on one case, for different examiners were responsible for different cases.) A very complete physical (including the various special laboratory tests), neurological, psychiatric, psychological, educational and social study was made of each child. The social investigation made by the psychiatric clinic differs from that usually made by probation officers or other social case-workers chiefly in the special emphasis that it lays upon facts related to the physical and mental development of the child, his family, his immediate ancestry and the mental attitude of the individuals who make up the little world that surrounds the child. It seeks to record the interplay of personalities and to find there, as well as in the concrete evidences of care or neglect that the home affords, the causes of maladjustment or unhappiness.

"When all the facts were in, a conference was held by the various clinic workers concerned in the study—the

psychiatrist, the physician who made the physical examination, the psychologist and the psychiatric social worker. At this conference, the entire case was discussed and a summary report of all the findings, together with recommendations, was prepared. This report was given to the court, the probation officer, the social worker, or other person who referred the child for study. Each report included suggestions for treatment along the following main lines: medical, psychiatric, educational and social. A monthly follow-up form was used by the clinic in which the clinic, through the services of one of its psychiatric social workers, endeavored to find out how well those who referred the children for study were carrying out the recommendations for treatment."

Recommendations.

"Medical: Special attention should be given to a general constructive regime in building up this boy's strength and weight. His tonsils should be carefully watched.

"Psychiatric: Repeated contact with the psychiatrist of the clinic is advised in order that a serious effort may be made to go more fully into the mental life of the child, and to secure this co-operation in the attempt to overcome his personality difficulties and to adjust himself to home and school. Careful consideration should be given to his sex life, and an effort should be made to supplant his present unhealthy mental imagery and activities with more wholesome interests.

"Educational: While this boy should continue to receive academic training, we would advise that special stress be

laid on manual and industrial work. He has abilities along these lines superior to his mental age, and special use should be made of them by the school authorities in fitting him for something in life. Aside from the effects purely in educational training, we believe that such a regime would go far toward adjusting his personality difficulties.

“Social: Probationary supervision in his home is recommended, with very close and intensive contact. A special effort should be made by the probation officer to give to the parents a proper understanding of the child’s difficulties, the dangers of a future career in crime, and what the right sort of co-operation from them along the lines of prevention should be. The father should be tactfully led to see the clinic’s point of view and interested in providing some natural outlet for the boy’s energies—mechanical work, Boy Scout troop, and other healthy recreational interests.”

Before leaving the subject of criminal psychology, I wish to call particular attention to a new and interesting theory of crime and its remedy, which has recently appeared.²⁷ The theory seems to have some authoritative weight, as it is based upon the examination of some 40,000 cases in the Criminal Courts of Chicago by Judge Harry Olson, Chief Justice of the Municipal Court of Chicago and Dr. William J. Hickson, Director of the Psychopathic Laboratory attached to the criminal branch of that court.

They state that crime is caused by an hereditary physical defect of the lower brain or basal ganglia, whereby the sub-

²⁷ *The Cause of Crime, The Cure for Crime, and Crime and Heredity*, by French Strother, which appeared in the *World’s Work Magazine*, July, August and September, 1924.

ject is rendered so far below normal in emotion that he has little or no conscience, or so far above normal in emotion as to make him hysterically irresponsible. They further state that nearly 100 per cent. of all criminals are emotionally subnormal. Intelligence, they say, has little to do with crime except that a high degree of intelligence may tend to act as a brake to emotional impulses which would lead to crime.

Read what the first article says regarding tests of the emotions, and the results which may be deducted.

“But very few scientists, even, know that it is now possible to test, with equal accuracy, a man’s power to feel. The scientific expression is, to test his ‘affectivity’—that is, the quickness, intensity, and normality with which his lower mind responds to, or is ‘affected’ by, appeals to his emotional nature. And as a man’s conduct, behavior, ‘goodness’ or ‘badness,’ reside in his response of emotion and will (functions of the lower mind), these tests are a pretty accurate index not only of the quality (emotion) of his lower mind, but also of what he would be likely to do (will) under any given temptation in every-day life. * * *

Every type of criminal has his characteristic response to them. You can test a boy of seventeen, and then declare with practical certainty that he will commit murder before he is twenty-five. It has been done, in a dozen cases. You can test another boy and then know that he will commit arson within the same period. You can test another, and know that he will be a thief every time he is out of jail. You can test another, and then be confident that he will never commit a crime in his life, not of any kind.”



DR. WILLIAM J. HICKSON

Director of the Psychopathic Laboratory attached to the criminal division of the Municipal Court of Chicago, who has endeavored to test the criminal insanity of a man by testing the emotions.

Are these not astounding claims to make? If they are true, then indeed a tremendous stride has been made in the study of criminology. The tests, so far as they can be comprehended from the articles, seem to consist of the reproduction by the subject of certain simple drawings shown to him, and certain word tests. In the latter test, which, by the way, is quite common to the psychologist, certain critical words of an emotion-evoking character are given to the subject, and he is to tell the first word that comes to mind, or what is termed the associated word. Thus, if the subject were given the word "red" and he replied "color," he would have a normal emotion so far as that word is concerned, while if he responded "fire" you would suspect him of arson, or if he responded "blood" you might think of him as a murderer. Such is the logic of the Olson and Hickson theory.

The emotional defect, which causes crime is emotional insanity of an inherited and incurable kind, say the articles. The specific disease present is called *dementia praecox*. The articles further state that the remedy for all crime is the abolition of prisons, and the establishment of farms where the incurable insane will be kept for life. Little blame is placed on environment for crime. Environment plays a part, it is claimed, but only in that it may offer a greater temptation or opportunity for the action of an unstable emotion.

All of the theory just stated may or may not be true. If it is true, it would not naturally conflict with the criminal program heretofore outlined. It would simply add one or two more diseases to the list of organic diseases which

cause crime. But before we accept any such theory as true, we should require a great deal more proof than the popularly written articles disclose. New standards will have to be established. What is normal emotion? We must know what it is before we can say that a person is abnormal emotionally. The theory conflicts with the investigations of others. For instance, it claims that practically 100 per cent. of all criminals are emotionally subnormal. Professor Gates of Columbia University says, "The extremely unemotional individual is less easy to detect and his behavior is less a serious matter with the exception of the infrequent cases caused by actual disease. The least emotional individuals are by no means unemotional, but they are aroused less frequently and less intensely. The mechanism of the emotions, designed for emergencies, is rather easily aroused even in those relatively unresponsive. It is the over-emotional rather than the under-emotional who experience difficulties in adaptation to modern conditions."²⁸

Then again if we credit emotions with the cause of crime, how are we going to dispose of the subject of inherited instincts, which all psychologists agree play a very important part in life?

It seems to me that the articles slighted the subject of environment. Surely they do not claim that animate and inanimate surroundings do not have a marked influence in the formation of criminal tendencies. The articles quoted the Mendelian law as to heredity, and cited illustrations in the heredity of plants, but was it not known that in the

²⁸ Arthur I. Gates, *Psychology for Students of Education*, p. 176.

illustrations cited the environment was carefully controlled so that it would not interfere with the workings of heredity?

The theory at least furnishes a subject for further thought and argument. The truth requires more proof than has been offered. That the subject is receiving some argument is evidenced by two articles found in the *Forum Magazine* for April, 1925. After a reiteration of the theory by Neil McCullough Clark, Walter Pitkin attacks the whole theory not from the standpoint of psychology or physiology, but, as he says, from the standpoint of logic and common sense. That the discussion of Mr. Pitkin is so interesting and humorous is our excuse for quoting certain extracts. He says:

"I also protest against the free and easy manner in which our criminologists draw panoramic conclusions about criminals from facts known about convicts. Are most criminals convicts? Or, if they are not, are convicts fairly typical of all criminals? Here we enter upon the crux of the matter. I shall contend, in defense of the intelligent criminal, that all sweeping assertions about our lawbreakers are silly in so far as they merely generalize about prison surveys. I shall maintain that the public is being seriously misled by even the most scrupulous biometrists like Goring and quite befuddled by the Chicago psychopathic laboratory.

"There are six broad classes of criminals. Class A embraces those few heroes whose names and deeds have never been whispered into the ear of desk sergeant or blackmailer. These are the Great Unknowns, the Men Higher Up. Class B embraces a goodly multitude of slick operators who are known to the police, to credit men, and to insurance ad-

justers as the Buttered Eels of Darkness,—altogether too slippery ever to be caught, but fingered now and then by their hunters. Class C is a mighty army; its thousands are being continually dragged into courts, only to emerge on their lawyers' arms grinning triumphantly at the camera men on the curb. Class D is another horde, but of lesser fortune; its members are forever losing out in civil and criminal courts, but always over charges and issues which insiders know to be masks for graver offenses. They lose in the small, to win in the big. Class E is a loose drove, all occasional amateurs at crime,—the sort who 'go wrong' once and are thereafter victims of remorse. They include the gentleman who finds a pearl necklace and neglects to return it, the bishop who can not resist the blandishments of a fair but neurotic parishioner, the bank clerk who, having plunged just once on the races, borrows from the safe until next week,—and so on.

"Finally we come to Class F, the habitual criminals who make up one-half of our total prison population. In and out, out again and in again, they display either a singular love of jail or else a singular inability to keep out of lock-step.

"How do these six classes fare with our criminologists who announce so glibly that all criminals are defectives? To put it conservatively, these estimable seekers of truth have never met and measured a single member of Class A, Class B, and Class C. They have measured in Class D only those who have been convicted in the criminal courts; they have never encountered those who have been discharged or acquitted there, nor those who have deftly

ducked into the civil courts. They have measured in Class E only those who have been convicted. But in Class F they have charted, graphed, psychoanalyzed, and generally reduced to writing and numbers every man-jack and woman-jill of them. What effect has all this upon their findings?

“Simply this: They have proved that all ‘crooks’ are ‘boobs’ by measuring minutely all the ‘boobs’ among the ‘crooks.’ What could be neater? In the same manner, you may demonstrate with Euclidean rigor that all Marathon runners are underweight, asthmatic and knock-kneed by carefully selecting as specimens to measure all persons who have come in last in any race. * * * But these jail inmates constitute between two and three per cent. of the probable number of persons who, in the strict technical sense of the word, are criminals. Inasmuch as the probable percentage of seriously subnormal persons in the total criminal group is between five and ten per cent., it is clear that the convicts simply represent those inferior criminals who, because of imperfect wit, strenuousness, or opportunity, have failed in business and gone into the hands of a receiver.

“To infer from their mentality anything about the great, solid, upstanding ninety per cent. of our hard working, sincere, thorough, conscientious and highly intelligent gun men, badger gamesters, procurers and politicians is to betray a mental defect worthy of the bottom five per cent. The intelligent criminal never gets caught except by an act of Providence, which usually turns out to be the slick move of a competitor. He will never be measured for his mind or a striped suit. For the odds in his favor are much better than they run in the more conservative businesses and pro-

fessions. Any young man who wishes to succeed by plain hard work and clean thinking can not do better than to take up crookery, especially along business and political lines. He may leave all the rough stuff to the semi-skilled laborer with a low intelligence quotient. And, as long as he keeps awake and sober, he will thrive. For, as Hickson has shown, all the failures commit 'slips of the mind'."

For further research into criminal psychology the lawyer is referred to the bibliography at the end of the book.

PART III

PERSONAL PSYCHOLOGY

CHAPTER VII

SOME IMPORTANT MENTAL STATES AND PROCESSES

Thus far in our study of human nature, we have considered the applications of psychology to trial practice. We have seen that there are certain methods and principles which prudence, as well as psychology, admonishes the lawyer to use in dealing with the mental problems of the courtroom. In the consideration of those methods and principles, the aim which we attempted to serve was an objective one. We are interested only secondarily in the mind of the lawyer himself. Our primary interest was in the other fellow, whose mind must be influenced to produce desirable conduct. Here, however, the situation is reversed. Our interest now is a subjective one. The mind of the lawyer, himself, is the field for inquiry and examination. We must note the way our own mind works, and we must learn how psychology may be applied consciously to improve our own mental natures. It is impossible to discuss all the mental states and processes, as the number thereof is exceedingly large. We have thus chosen those which seem to be of most importance in a lawyer's mental system.

1. Habit.

Habit is a word with which all of us are familiar. It is a common word, the meaning of which, all of us know fairly well. Few may realize, however, that when we refer to a habit we are referring to a mental process or condition, and not to the physical manifestation of that condition. True, the mental process of habit may not and usually is not accompanied by conscious direction, yet this is because such accompaniment is unnecessary. The mind has learned the requirements of the habit so well that the process becomes automatic, and needs no guiding in performance. In certain particulars a good comparison may be made with an automatic telephone switchboard. When a definite number is received by the switchboard there is a prior determined connection made. So with habit. When a habit stimulus reaches the brain there are prior determined brain paths used, so that the response is quite invariable. Both the switchboard and habits are mechanical in nature. Thus habit is seen to be a sort of sub-control of our minds, by which acts and responses are made to stimuli, even without conscious direction. The rate of progress in the formation of a habit depends upon the number of repetitions of the act which have already occurred, upon the intensity of the individual repetitions, upon the recency of the original acquisition and upon whether the act conflicts with acts of a different nature which use the same mental pathways.¹

The benefits which can be derived from habits may be expressed in many different ways. We classify them under

¹ Howard C. Warren, *Elements of Human Psychology*, p. 257.

five heads. First: Habits may be beneficial because they cause a response which is more prompt than would be the response if the act were not habitual.² The personal habit of dressing may serve as an illustration. Suppose that we had to stop and think before we buttoned each button, or before we put each shoe lace through an eyelet. No one will dispute that if such were the necessary procedure, we would spend a great deal more time dressing than we do. As it is now we have formed habits of lacing our shoes and buttoning our clothes, so that we may continue to dress even though our minds may be absorbed in the morning paper or in the tasks which lie before us that day. Second: Habits make for accuracy of action.³ We see this clearly in writing. Take your pen and try to direct consciously how each movement shall be made in writing a word. It will be necessary to think whenever the direction of a line is changed. You will note that the mechanical accuracy has now disappeared, and you write as a school boy who has not yet learned the habit of writing. Third: Habits reduce mental fatigue.⁴ If the mind had to direct all the many actions which are now habitual, it would soon be tremendously overburdened. Fourth: Habits leave the mind free to devote itself to other tasks.⁵ In this phase habits bear a marked resemblance to the economic process of storing

² Howard C. Warren, *Elements of Human Psychology*, p. 258; Irwin Edman, *Human Traits*, pp. 33, 34.

³ William James, *Psychology, Briefer Course*, p. 138; Howard C. Warren, *Elements of Human Psy-*

chology, p. 258.

⁴ William James, *Psychology, Briefer Course*, p. 138.

⁵ William James, *Psychology, Briefer Course*, pp. 139, 144, 145; Bernard C. Ewer, *Applied Psychology*, p. 166.

up surplus capital whereby it becomes possible for a man to use his energies in other activities than those of merely making a bare living. This freedom of the mind does not presuppose, of course, that the available freedom will be used to good advantage, but it does make such a condition possible if the individual wills it. Fifth: Habits are a check and balance on life.⁶ Not only do they prevent individuals from traveling on too radical a tangent, but they prevent nations as well from so traveling. The habits formed through past environment are not easily cast aside, for habits once formed tend to hinder and obstruct the formation of any habits which work contrary to the ones already in existence.

Habits may be disadvantageous, however, as well as advantageous.⁷ Indeed the very reasons which make habits beneficial may also make them harmful. It all depends on the habit itself. If the habit formed is a beneficial one, we say that habit is a good thing, but if the habit formed is a harmful one, we say that habit is a bad thing. A bad habit follows the same psychological laws as a good one. It is just as prompt and mechanical in action; it is just as accurate; it is just as enduring; and it may tend to keep one in ruts when one's interests require that one get out and make a change. Furthermore habits may remove from consciousness some actions which ought to be left there. We may make habits of some actions which ought to be varied each time. Witness the trite expressions commonly

⁶ Irwin Edman, *Human Traits*, pp. 35, 36.

Applied Psychology, pp. 273, 274;
Irwin Edman, *Human Traits*, pp.

⁷ Hollingworth & Poffenberger, 36, 37.

used on the street and in poor business letters. If we do not watch we may form so many habits as to become mere automatons. Thus we see that habit is a good mental process when the result is good, but it is not a good mental process when the result is bad. It is all a matter of the nature of the habit.

Let us see what kind of actions may become habits. This is very important, because in a later paragraph, we shall consider the making and breaking of habits, and we shall want to know just what actions may be habits. We may have both motor and mental habits.⁸ That is, habits may cause us to perform certain acts with our bodies, or they may cause us to use our minds in certain manners. As to motor or physical acts we need go no further, for it seems comparatively certain that any such act may be embodied in a habit, of course, only up to the physiological limit of endurance. With the mental question we shall be compelled to make some careful discriminations for not all mental processes may become habits. No complete or complicated mental process can become habitual in operation. Thus reason can not become a habit, but the individual parts or individual stimuli of such a process are frequently nothing more than the operation of habits. Let us consider this more concretely using the illustration of reason. We have stated that reason is not and can not be a habit, but there may be a habit of collecting the facts, of weighing them, of reserving judgment, and of thinking before deciding. All of these particulars are involved in reason, and they may

⁸ Howard C. Warren, *Elements of Human Psychology*, p. 253.

become habitual in operation. Possibly the distinction may be clearer if we were to say that reason can not be a habit, but that the technique of reason may.

The lawyer has two kinds of habits, namely, personal and professional. His personal habits bear a close resemblance to the personal habits of any other professional man. They substantially embrace contact with the present day necessities of existence which are many in number. In professional habits, however, he differs from that of any other class. He may acquire professional habits of dress, or of speech, or bearing, but more pronounced are his habits of thought. We say that after a man has practiced law for a number of years he becomes set in his manners and thoughts, and that he looks at a proposition from a legal angle. We say that frequently he becomes too narrow or technical in his viewpoint, and considers form rather than the end to be served. These things are evidence of the formation of legal habits. They are trade marks of the profession. Many of them are particularly desirable and useful ones, but like all habits they may hinder the formation of other equally advantageous habits which are necessary for balance-wheel purposes. The evidence of professional habits is no more clearly shown than in the difference between the neophyte and the veteran. The young practitioner seems more likely to give offhand opinions upon the legality of a proposition, while the wary veteran might reserve judgment for more careful consideration.

In his book on *Psychology Applied to Legal Evidence*, Arnold calls our attention to the fact, that the effect of habit on the legal mind is not a particularly desirable result, when he says:

“It is the habit of the legal mind to try and force legal principles and ideas which have applied to some cases in the past on whatever facts may now arise regardless of whether they fit or not. Through perpetually looking backwards our lawyers have developed a mental tendency which prevents them looking forward; exclusive regard to precedents and decisions has rendered a certain species of thinking—if thinking it may be called—automatic with them, and the ingenuity which they display in bringing their legal maxims to bear on the particular case only serves to make them the more inaccessible to new ideas. They live in an artificial world of their own apparently oblivious of the fact which, if it were not for the harm it often does to the person and property of individuals, would be as amusing to the outside person as are their attempts to square their decisions with their principles, attempts which remind one of nothing so much as the endeavors of the old mathematicians to square the circle. Nor is this result to be wondered at when they steadfastly refuse to consider as possibly correct any reason which clashes with past views, or even to conceive of any country or circumstances in which their precedents may not apply; the old decisions must therefore be repeated, and the oftener they are repeated the greater the habit must become.”

We now come to the last division of this chapter which deals with the making of new habits and with the breaking of old ones. Habits may be formed either from the conscious effort to do so, or they may be formed from accidental causes. By this we mean that one may so wilfully learn an act that it develops into a habit, or through outside environmental causes, one may be compelled to do the act

under the proper conditions to cause the formation of a habit. Many of our habits, especially the ones formed in very early age, are of the latter kind. Their formation was involuntary. Whether the habit is created through voluntary or involuntary means, it depends for its fixation upon the number of times the act is repeated, upon the intensity, upon the recency of the acts, upon the conflict of the act with other acts using the same brain paths,⁹ and upon the plasticity of the brain matter.¹⁰

Enough of these factors must be favorable before the act can be learned well enough to be a habit. A certain number of repetitions is necessary although where the intensity is great, as in the case of the so-called habit forming drugs, fewer repetitions are necessary than where the acts are of weak intensity, other factors being equal. Recent occurrences have more of a present effect in forming a habit than do the same occurrences long past. If the act conflicts with an already formed habit or with an inclination, more repetitions are necessary than where it does not. If the act produces a satisfying result, the act has more habit forming power than if the act produces a distasteful result, because acts which produce satisfying results tend to repeat themselves while acts which produce dissatisfying results tend to hinder their occurring again.¹¹ These are the factors of learning upon which the formation of the habit depends, yet they do not operate mechanically in the case of the desire to form a habit. There is another factor besides mere

⁹ Howard C. Warren, *Elements of Human Psychology*, p. 257.

¹⁰ William James, *Psychology, Briefer Course*, pp. 134-136.

¹¹ Arthur I. Gates, *Psychology for Students of Education*, p. 230.

desire which enters into the question. It is will. Without the willing and the willing strongly enough to do the things which will form a habit no habit may be consciously formed or broken. In his classical essay on habit, James¹² gives four rules for making or breaking habits. Briefly they are as follows: (1) Launch the initial effort as strongly as possible; (2) suffer no exceptions until the habit is firmly fixed; (3) seize the first opportunity to act on every resolution and prompting favorable to the habit; and (4) keep the faculty of effort alive by gratuitous exercise each day. If making a habit depends on learning then breaking the habit depends upon forgetting. Forced forgetting through voluntary refusal to carry out the habit when it wants to act will in time break the habit, but the easier way where it is possible is simply to oppose the old habit by the formation of a new, which is strong enough successfully to stifle the old one. That seems to be the best method of breaking an old habit with the least effort.

2. Memory.

In the chapter on Evidence we were concerned with the subject of memory, but only in so far as it affected the reliability of testimony of a witness. Our problem there was to point out the fallacies of memory, and to show how they might be accurately ear-marked. Here our problem is of a different nature. Now we are interested in memory from a personal standpoint. In the aforementioned chapter we had our attention called to the memory faults. Now we

¹² William James, *Psychology*
Briefer Course, pp. 134-150.

want to know how these faults may be overcome, and how the memory may be developed and trained so that it will retain facts more accurately, and for a longer period of time. If it were not so evident, we would also call extended attention to the great importance of a good memory, but we would be wasting words were we more than to mention the fact to show that it has not been omitted through a lack of consideration.

Memory is the knowledge of a state of mind after it has dropped from consciousness.¹³ We term the process recall, although what really occurs is simply a return to vivid consciousness of a previous mental state which has left a sufficient impression on the mind to make possible a stimulus for the return.¹⁴ The impression made by the previous mental state consists in the formation of what we term "brain paths" or connection in the brain between the incoming stimulus and the outgoing response. They are simply paths of discharge which redirect nerve impulses. When a new and associated impulse connects with one of these paths it tends to cause a knowledge of the mental state which formed the path. The quality of the memory in its last analysis depends on the number and the strength of these brain paths.¹⁵ If they are few in number and if they rapidly lose their enduring power, the memory will

¹³ William James, *Psychology, Briefer Course*, p. 287. For the behaviorist's definition of memory see John B. Watson, *Psychology from the Standpoint of a Behaviorist*, p. 304.

¹⁴ Howard C. Warren, *Elements of Human Psychology*, pp. 127,

180, 181; James Rowland Angell, *An Introduction to Psychology*, pp. 138, 139.

¹⁵ William James, *Psychology Briefer Course*, pp. 292-296.

be weak. Where the opposite conditions are true, the memory may reach considerable efficiency.

Thus, as the conditions of memory depend on these brain paths, we may safely draw the conclusion that all improvement in memory is the result either of an increase in the number of paths whereby more associative possibilities for recall are made available, or of a strengthening of the paths that do exist so that they will persist longer. This is the process of learning,¹⁶ and from it we may conclude that all improvement in memory must come through better learning of the thing to be remembered.¹⁷ The better it is learned, the better it will be remembered. Our problem is then one of learning, and we shall treat it as such, but we shall develop only those principles of learning which are of the most value to memory.

There are two ways to learn things.¹⁸ One is by the rote method. The other is by the associated method. When we use the first or rote method, we simply repeat and repeat and repeat the material as it is until it sticks in the mind. We make no attempt to connect it or to associate it with

¹⁶ Hollingworth & Poffenberger, *Applied Psychology*, p. 64.

¹⁷ The factors upon which memory depend are given by Howard C. Warren in *Elements of Human Psychology*, p. 191, as perception, the learning process, and verbal association.

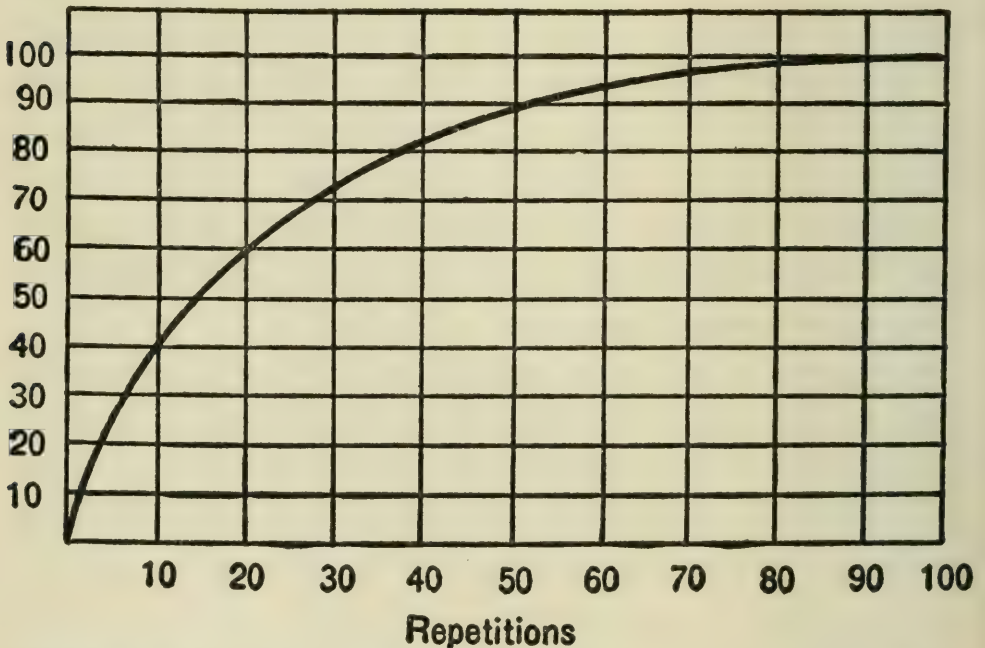
Bernard C. Ewer in *Applied Psychology*, pp. 198, 199, says "Since natural retentiveness is substantially unchangeable one can 'improve one's memory' only

by cultivating habits of concentrated observation and systematic learning, a methodical practice of reflective association, and an attitude of assurance which tends to prevent inhibitions from working." By definition the writer includes all of these factors under the title of the process of learning as they are factors thereof.

¹⁸ Hollingworth & Poffenberger, *Applied Psychology*, pp. 64-66.

anything already present in consciousness. Thus we form few brain paths, but they are usually quite strong ones. This method of memorizing has the disadvantage of requiring more time for learning, but it has the advantage of making the recall more prompt than when the learning has been accomplished by the associative method. It is

Percentage



Curve showing the influence of repetition upon the memory. (From Poffenberger, *Psychology in Advertising*.)

advised that foreign languages which are learned to be spoken should be learned by the rote method, because the recall must be very rapid if speech is not to be delayed. Any material which a lawyer must have at his tongue's end should be learned by the rote method.

The associative method, by which the material to be learned is grouped, or sorted, or connected to already exist-

ing knowledge, requires less time to master, makes the recall slower, but makes the memory last longer. Most of a lawyer's knowledge should be of this type. It is less of a burden on the mind. It allows greater learning in the same time, and makes that learning last longer. The recall, while not as prompt as that of rote learning, is still rapid enough for the majority of legal uses. The so-called mnemonic memory systems are based upon associative learning. Such a system is described in Appendix B. A code is first impressed on the mind. Things to be learned are then associated with the code. The system is ordinarily of little value. It is much overrated by many, and unless a long list of words as such are to be remembered a person had better learn directly without using the code.

In the previously mentioned chapter on evidence we stated that testimony is frequently inaccurate because it is based upon incidental memory. That is, the witness had no intention of remembering the matters about which he is called upon to testify. Memory which is based upon unintentional or incidental learning is not nearly as good as memory which is based upon intentional learning or the will to remember.¹⁹

Unintentional memory is mere accidental memory, such as one would have, when there had been no desire or intent to remember but where the facts had just happened to stick. Intentional memory is, on the other hand, a willed memory where there was desire and effort made to remember at the time the material was learned. Thus, if we would

¹⁹ Hollingworth & Poffenberger, *Applied Psychology*, p. 252.

have the best memory we must base it upon intentional learning to recall and not upon accidental learning.

There has been much experimentation as to whether learning by wholes or by parts makes memory better.²⁰ Learning by whole would be illustrated in the case of memorizing a poem in its entirety, so that all will be learned when any individual part will be learned. Learning by parts in the same case would be the learning of each line or verse, and not learning the balance until that line or verse had been first learned. The learning by entirety seems to be the preferable method for ease of learning, and for more connected recall. Thus, if a lawyer is required to learn a long statute or an opponent's brief he will do well if he learns the thing as a whole, and does not attempt to learn it piecemeal. Of course, after it is learned, it may require a piecemeal scrutinizing.

There is one more factor in learning we shall consider. This has to do with learning periods, and is connected somewhat with fatigue. If there are five hours available for learning a task, the five hours can be utilized most efficiently by dividing it into a number of periods with intervening intermissions.²¹ There are several reasons why this is the truth. A short rest allows the mind to recuperate, so that while it is working it can work at the highest efficiency. Short rests of frequent occurrence also prevent fatigue from becoming too great at any time. There would seem to be

²⁰ Arthur I. Gates, *Psychology for Students of Education*, pp. 289-293; Hollingworth & Poffenberger, *Applied Psychology*, pp. 66, 67.

²¹ Arthur I. Gates, *Psychology for Students of Education*, pp. 285-287; Hollingworth & Poffenberger, *Applied Psychology*, pp. 67, 68.

other reasons why periodic learning is the best method, but the most that can be said now is that experimentation on actual cases has shown that the division of the total learning time into a number of periods of shorter length has aided learning and memory.

Walter Dill Scott²² says: "It is not possible for a person with a poor memory to develop a good one, but everyone can improve his memory by the observance of a few well-known and thoroughly established principles. The first principle is repetition. If you want to make sure that you will remember a name, say it over to yourself. * * * The second principle is intensity. If you want to remember a name pay the strictest possible attention to it. * * * The third principle is that of association. * * * The fourth principle is that of ingenuity. I remember the name of Miss Low, if she is a short woman. I remember a friend's telephone number, which is 1391, by thinking how unfortunate it is to have such a number to remember—13 is supposed to be an unlucky number, and 91 is seven times 13."

3. Will.

The so-called "will power" has been shamelessly bragged about as the universal panacea for all human failings. Indeed, so much has been claimed for it that many are skeptical as to whether it has any applicable value at all. Voluminous have been the popular dissertations on the subject, and only a critical psychologist can distinguish the fact concealed in the mass of fiction. That will is an essential power

²² Walter Dill Scott, *Psychology of Advertising*, pp. 112-114.

to possess, to train, and to use, we agree, but in relative importance it does not surmount such other faculties as reason or habit. In fact will power is rather a useless, and certainly an unbalanced faculty, unless numerous other ones form a solid foundation for its exercise. Not an extremely large number of facts concerning will, which may be directly applied in practice, are known, and we have to be very careful not to trespass that limit in what we may say.

Will is nothing more and nothing less than the power of making decisions, or of choosing what to do among several possible alternatives.²³ It also involves the carrying out of the decision. The will is used constantly all day long, as every time we consciously move or think, we are choosing between possible alternatives. Thus the writer is using his will in writing. He has the possible alternatives of not writing or of doing endless other things. His will is not, however, sorely taxed, because the result of writing is a pleasure. Nevertheless he is using his will, although many people would not seem to think so, because the task is pleasurable and requires no great driving force. Tasks for the exercise of will may be either pleasant or unpleasant. The use of will, however, is more frequently associated with unpleasant tasks. There, of course, the use of the will finds its greatest value. Undoubtedly it is a driving force which compels decisions to be made and carried out which are not pleasant, yet which serve a utilitarian purpose.

²³ Walter Dill Scott, *Psychology of Advertising*, p. 195; James Rowland Angell, *Introduction to Psychology*, p. 237.

In its final analysis the use of will is the use of attention.²⁴ While the decision is being made we are attending to the many possible actions, but when the decision is made and being carried out, we are confining the attention to those particulars which serve to maintain the decision, and to accomplish its end.

Will power is, of course, necessary to a lawyer. Without it he would be a spineless creature, never winning a case, and never accomplishing anything under difficulties. With its presence, however, is found strength, determination, confidence and the power of coming-back after a defeat. We commonly call it grit or persistence, but it is only the force of a decision accompanied by insistence in the carrying out of that decision.

The will is trained by action, and the action must involve difficult tasks. Pleasurable actions leave the will as they find it. Non-pleasurable actions weaken the will when they fail, and strengthen it when they succeed. Thus, in order to strengthen the will, the task must be difficult, but it must not be impossible for the will to master. When a decision is made, it must be held firmly before the mind until it is carried out. It must not be permitted to fade, or it is lost. Without doubt, the will may be developed by practice until it becomes very strong indeed, but the process involves frequent efforts, each requiring a little more strain than the preceding one. It is all a process of gradual development, but one that is well worth the time and effort necessary to attainment.²⁵

²⁴ William James, *Psychology*, Briefer Course, p. 450; James Rowland Angell, *Introduction to Psychology*, p. 237.

²⁵ See William James, *Psychology*, Briefer Course, p. 149.

4. Imagination.

It may seem to be straining the point to say that imagination is of much value to a lawyer. This belief is due to a faulty conception as to the nature of this mental process. Most people think of it as a product of fancy having nothing in common with any real experiences of life. This is an entirely incorrect presumption, for imaginations are simply copies of previously experienced sensations which arise in the mind after the original stimulus is gone.²⁶ The original stimulus is gone, but the mental image comes back to vivid consciousness again. This image, or mind-picture of previous situations, does not have to be a sight picture either. It may be one of taste, or smell, or sound, or touch, or pain, or warmth.²⁷ Any sensation, once experienced, tends to modify the brain, so that it may reoccur again in consciousness in the form of an image. The place where most people become mistaken as to the nature of imagination arises in those cases where the image is not in the same form as the sensations which originally caused it. Some images are so like the original sensations that they are recognized as copies, but many times the image will be composed of the parts of a number of prior sensations in such a peculiar, weird or ludicrous combination that we certainly can not trace it to anything we have experienced before. Where the image is like the original sensation we term the process reproductive imagination.²⁸ It is but a plain form of mem-

²⁶ William James, *Psychology*,
Briefer Course, p. 302.

²⁷ James Rowland Angell, *Introduction to Psychology*, p. 153;

William James, *Psychology*,
Briefer Course, pp. 306, 308.

²⁸ William James, *Psychology*,
Briefer Course, p. 302.



The tachistoscope is an instrument used in the laboratory for investigating visual perception. It exposes a word or picture to the vision of the subject for a definite period of time which is variable at the will of the operator.

ory, and is subject to the rules as stated previously in this chapter under the head of memory. Where, however, the image bears no marked resemblance to prior sensations, we term the process productive imagination.²⁹ With this latter type we shall deal here, because it serves a distinctive purpose apart from memory.

The value to the lawyer of imagination is that it allows him to mix-up the experiences and knowledge of all past sensations in such a way as may allow the future to be anticipated. This means constructive thinking. When an apparently new or novel situation arises or is likely to arise, he may ransack his mind, taking a bit from one prior sensation, and a bit from another, and so on until an image is formed of what is likely to occur. Thus, new situations may be anticipated before they really present themselves. In all creative work, imagination is indispensable to success. Even in those occupations which are not termed creative, verbal thinking by the use of images is frequently valuable to clear, if not to extensive, thinking.

The faults of imagination are major ones. All of us do some day dreaming. It takes us away from the realities of life, and gives us periods of independence from our environments. Used to excess, this is weakening because it tends to make us seek pleasure in imagination rather than by exerting efforts to modify our environments to give us the pleasure in reality. Extended use of the imagination may lead to a sort of self-pity, or to the creation of defense

²⁹ William James, *Psychology*,
Briefer Course, p. 302.

mechanisms, both of which weaken initiative and lessen ambition.

Whether the imagination may be trained seems to be still a question for solution. "The best experimental evidence seems to show that a very considerable development of specific imagery may be achieved by the voluntary attempt to make use of it, provided there be a reasonable body of it available to start with. One can then by very little effort develop visual imagery by compelling one's self, for example, to solve simple geometrical problems by means of such images. Nobody has as yet hit upon any reliable method for eliciting imagery which is at the outset substantially lacking."³⁰

5. Reason.³¹

Psychologists are not definitely agreed as to what may properly be included in a definition of reason. For the purposes of this chapter, however, reason may be defined as purposive thinking³² or as the process of solving problems by means of ideas.³³

The faculty of reason is one of the highest powers of man. To be able to reason well is an indication of excep-

³⁰ J. R. Angell, *Introduction to Psychology*, p. 167.

³¹ There are a number of excellent writings on the subject of reason. The following list comprises a few of them: Madison Bentley, *The Field of Psychology*, pp. 335-383; Harvey A. Carr, *Psychology*, pp. 189-215; Stephen Sheldon Colvin, *The Learning Process*, pp. 295-318; John Dewey,

How We Think; Arthur I. Gates, *Elementary Psychology*, pp. 421-440; Harry D. Kitson, *How to Use Your Mind*, pp. 118-137; W. B. Pillsbury, *Psychology of Reasoning*; *Education as the Psychologist Sees It*, pp. 205-220.

³² W. B. Pillsbury, *Essentials of Psychology*, Rev. Ed., p. 241.

³³ Harvey A. Carr, *Psychology*, p. 189.

tional mental development. "It is a mark of originality and intelligence, and stamps its possessor not a copier but an originator, not a follower but a leader, not a slave, to have his thinking foisted upon him by others, but a free and independent intellect, unshackled by the bonds of ignorance and convention."³⁴

It is probably the most important single faculty which distinguishes man and elevates him above the lower animals. This is true according to the definition of reason which we have accepted, namely, that it is the solution of a problem by the process of thought, but it would not be true had we broadened our definition by including therein not only the solution of problems by purposive thinking but also the solution of problems by any motor or physical manipulations not the outcome of habit and instinct alone.³⁵ Under the broader definition animals do reason, an illustration of which is something like this: "The ape that is given a loop of rope and a banana placed within reach of the rope but beyond reach of his paw must do something analogous to reasoning to solve his problem. He has the desire but no known means of satisfying it. What he does is to make a series of movements with the loop, throwing it out towards the banana, until after many trials he succeeds in getting the banana in the loop and drawing it in."³⁶ The animal reasons by doing; man may reason by doing; but man can reason by thinking.

³⁴ Harry D. Kitson, *How to Use Your Mind*, p. 137.

³⁵ W. B. Pillsbury, *The Psychology of Reasoning*, p. 1; *Edu-*

cation as the Psychologist Sees It, p. 205.

³⁶ W. B. Pillsbury, *Education as the Psychologist Sees It*, p. 206.

In early childhood and before the development of ideas, reasoning is accomplished by the animal or motor method. Thus the formation of the habits of walking, talking and manipulating objects is due to this form of reasoning.³⁷ Children do, however, develop reasoning ability by thinking at an early age, but it is always limited by the limited memory span and by any poverty of ideas or facts. Gradually, however, as life progresses new experiences bring new facts, new ideas and greater intelligence with a consequent greater ability to reason by thinking.

By the use of reason, man is not only able to think of, but to think about, and around facts, juggling and sorting and fitting and eliminating them in such a fashion as to produce what we term the solution to a problem. It has as its basis the process of association or the connecting of facts having similarities, with the eliminating of facts not having similarities, in such a way that a logical result in point is drawn. Reasoning is the elaboration of thinking, and uses practically the entire list of mental faculties. This is no more clearly demonstrated than in the case of the loss of reason through the loss of one of the faculties of consciousness. Perception, discrimination, attention, imagination, volition and all the other faculties lend their individual characteristics to mould the result. This is one reason why a dozen different conclusions may be drawn by as many people from the same given set of facts. Law suits frequently arise from a similar condition. The facts may not

³⁷ Harvey A. Carr, *Psychology*,
p. 191.

be in dispute, but the reasoning produces two different results upon neither of which the parties can agree.

The lawyer has a great deal to do with reason. Our entire court procedure is based upon the presumption that justice of reason will supplant justice of force. To a large extent reason is a power in our trials, as we observed in the chapter on the appeal. There we learned that its influence consists in the producing of actual logical conclusions to problems, and also in the producing of conclusions not reasoned out, but which were egotistically believed to be reasoned out. While reason is of great value in the courtroom, the lawyer finds a still more valuable place for it in his office. There he uses reason most efficiently and effectively. There, with a calm and dispassionate mind, he can plan, and reason, and prepare not only the material which he will use in the trial, but also the endless other problems which seek him for solution. The lawyer who does not know how to reason can not solve aright these problems with such regularity as he could if his faculty of reason were better trained.

In order to make our study of reason of the most practical value we will first analyze the process and then state some rules for its improvement.

Some psychologists divide the process into five steps while others divide it into only three. Dewey,³⁸ for example, divides it into the following steps:

1. A felt difficulty.
2. Its location and definition.

³⁸ John Dewey, *How We Think*,
p. 72.

3. Suggestion of possible solution.
4. Development of the bearings of the suggestion.
5. Observation and experiment leading to acceptance or rejection.

Kitson,³⁹ however, in following the plan of Adams' Making the most of One's Mind, divides the process into but three steps. They are as follows:

1. Recognition of the problem to be solved.
2. Vigorous efforts to solve
 - (a) By systematic search guided by chosen ideas.
 - (b) By use of inference.
 - (c) Necessity for facts that:
 1. Arise with promptness—having been properly learned.
 2. Arise in an orderly manner—having been learned that way.
 3. Must be pertinent to matter in hand.
 4. Are clear—which may be accomplished by definition or classification.
3. A decision among suggested solutions.

For greater clarity let us assume an actual case with which a lawyer might be confronted. Suppose, for example, that a client has been indicted for burglary. We want to reason as to whether he is guilty or innocent. Following the steps as outlined by Kitson our first step is to recognize

³⁹ Harry D. Kitson, *How to Use Your Mind*, pp. 123-128.

that our problem is: "Is the client guilty or innocent of the crime of burglary as charged?"

Under step two we would probably confine our search to something like the following chosen ideas:

1. The man charged—record?
2. The crime charged { elements?—statutory?
 when?
 where?
3. The indictment—are all proceedings proper?
4. The evidence against { who? { weight?
 what?
5. The evidence for { who? { weight?
 what?
6. Confession or trial { what is best?
 what court?

We would run down these chosen ideas in order to call to mind all possible associated facts which may be vital to the case. This will lead us to a complete examination of both the law and the evidence and will give the entire facts upon which to base our inferences. An inference is the drawing of a conclusion from certain facts. It is clearly seen in the syllogism.

No man can be convicted under a defective indictment.

The indictment against our client is defective.

Therefore, our client can not be convicted.

This is reasoning by deductive inference. We commenced with a general rule and proceeded to prove a specific point under it. If, however, we had commenced with specific facts and proceeded to prove a general rule we would have employed inductive inference.

If we were attempting to prove an alibi our inference might read as follows:

No man can burglarize a house a hundred miles away.

Our client was a hundred miles away when the burglary was committed.

Therefore, our client did not burglarize the house.

We could form endless inferences from the facts. Indeed we must form inferences until we have considered all the facts and until we have reached a provable decision from among all the suggested solutions.

In all our inferences we used facts. They are the tools of reason but in order to be proper tools they must not only be expressible in words but they must come when called like a bell-boy after a tip; they must come in the proper order so that they can be fitted and connected logically; and they must be clear so that their full significance can be quickly understood and properly valued.

There are a number of ways in which the faculty of reason may be trained. Kitson⁴⁰ gives three. 1. Form habits of stating things in the form of problems. 2. Form habits by which ideas arise promptly and profusely. 3. Form habits of reserving decisions until the important facts are in. There are four additional ways which I would add.

⁴⁰ Harry D. Kitson, *How to Use Your Mind*, pp. 135, 136.

1. The acquisition of facts is always of value, because the more facts available the more possible solutions there are, and hence the greater possibility for finding the correct one. 2. The old adage in a modified form, that practice makes perfect, applies to reasoning. The practice, to be of the greatest value, must come not only from frequent trials, but from frequent critical trials wherein each fact is carefully scrutinized and each process checked. 3. A comparison with others is always valuable as it serves to impress not only the correct and false steps in one's own reasoning, but teaches a knowledge of the fallacies to look for in the reasoning of others. 4. A knowledge of the fallacies, too many to enumerate here, but which will be found in books on argumentation and logic, is an aid.

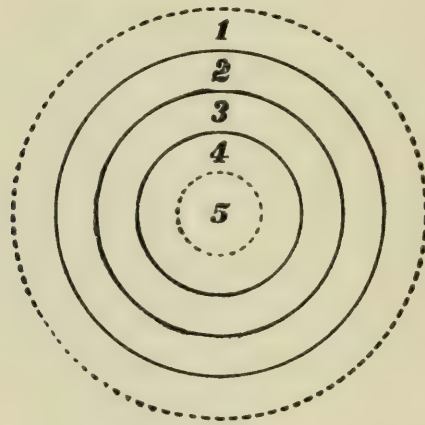
6. Attention.⁴¹

The development of the subject of attention might well have taken place in Part I of this volume, so valuable is it to the lawyer in the conduct of a law suit. There, undoubtedly, would have been an appropriate place for it along with The Appeal and The Presentation of the Appeal. Attention is, however, an individual mental state, so it was thought more proper to treat it here along with other mental states and processes. Even regardless of the position in which it is placed it has been written largely with

⁴¹ There are many excellent references on the subject of attention. Some of these are referred to in the body of this subject. A few of the others are as follows: W. B. Pillsbury, *Attention, and Education as the Psychologist Sees It*, pp. 107-137; Harry D. Kitson, *How to Use Your Mind*, pp. 102-117; Ribot, *Psychology of Attention*; R. S. Woodworth, *Psychology*, pp. 244-270; W. F. Book, *Learning How to Work Effectively*.

the end in view of making it of use in the courtroom. The reader must realize that the rules for securing and holding the attention of another may also be applied to one's own attention.

In a law suit the lawyer who knows best how to obtain



Graphic presentation of the field of consciousness. 1, the unconscious (physiological); 2, the subconscious; 3, diffused, vague consciousness; 4, more active and distinct consciousness; and 5, the focal point of attention. The zones are not distinct but shade into one another. (After Baldwin.)

and hold the attention of the judge and jury has a much better prima facie opportunity to make out his case than does his less well versed opponent. A few explanations will serve to verify the truth of this statement. Psychologists tell us that attention is a primary function or first state of mind and that it is a necessary prerequisite for many mental processes.⁴² This is particularly true with reference to any

⁴² Bernard C. Ewer, *Applied Psychology*, p. 182; James Rowland Angell, *Introduction to Psychology*, p. 59.

thought action. One can not reason unless the attention is first confined to the facts upon which the reasoning is based. One can not remember an idea unless the attention is at least partially focussed upon the idea when it is expressed. And so it is in the courtroom. If a lawyer presents evidence or arguments to a judge or jury without having their attention, he is simply inefficiently expending time and energy, as no conviction is possible where no impression is made. Let us take an illustration of an actual case. The plaintiff was a contractor suing for construction work done in the remodelling of the defendant's dwelling house. The defendant filed a counter claim, and the case went to trial on its merits. During the trial the plaintiff introduced a long ledger account of the transaction. Defendant's counsel, after carefully scrutinizing the account, found several errors of such importance as would normally prevent any recovery of the sum claimed by the plaintiff. A two hour cross-examination of the plaintiff followed in which the account was gone over in such detail that figures flew fast and furious to the jury.

The result was a creating of such a monotony that the jury were absolutely incapable of listening attentively to what was said, and the really vital part of the account never was understood in its true significance by them. A substantial verdict was rendered for the plaintiff. The case might have been lost, of course, by the defendant, even though the attention of the jury had not been forced to wander at the critical point of the trial, but his chances of winning would have been much greater if the attention of the jury had been with him instead of against him. At a

later point in this chapter we shall consider what one must do and what one must not do in order to hold attention. Had defendant's counsel known these principles he would not have handicapped his client as he did.

Before, however, we come to those principles, let us first analyze our subject so that we may accurately know what we are talking about. At all times there are many impressions besieging the consciousness for recognition.⁴³ The most of these impressions when realized result in the sensations of touch, pain, warmth, cold, taste, smell, sight and sound. Not all of these impressions are received by the mind. Some of them are never realized because the mind has not the capacity to receive them all at one time.⁴⁴ Those few impressions which are realized receive what we call attention, for attention is nothing more or less than giving heed to a few of the many impressions available. Take the common illustration of reading a novel. If the sensations received from the eyes are sufficiently interesting, the attention of the reader may be so confined to the story that persons speaking near by may not be heard at all. Some years ago the writer had occasion to visit frequently the sheet mill department of a large steel plant. A peculiar feature of attention was noted. So accustomed had the

⁴³ William James, *Psychology*, Briefer Course, p. 217.

⁴⁴ From six to eight objects can ordinarily be distinguished simultaneously, but the number may be increased to fifteen with practice, according to Howard C. Warren, *Elements of Human Psychology*, p. 164.

Not more than one disconnected system or process can go on simultaneously unless the processes are habitual. William James, *Psychology*, Briefer Course, p. 220.

workers become to the noise of the rollers upon the hot metal and to the constant clash of iron that they could disregard these noises by refusing to give them attention while with little difficulty they could hear each other talk. Needless to say, the writer experienced many auditory troubles. These illustrations serve only to show more clearly that attention is but the focussing of the mind upon some impressions while others are being disregarded. The reason why some impressions claim the attention in preference to others, we still have in store for us.

There is one additional characteristic of attention which makes it either a powerful ally or a powerful enemy of a lawyer in a trial. This characteristic is the fact that normal life countenances no such thing as inattention.⁴⁵ Every normal person pays attention to some stimulus at every waking moment. Something is always claiming its right to recognition by the mind. If the judge and jury are not paying attention to your evidence and your arguments, you may be sure that they are paying attention to other things, and they are probably paying attention to the case of your opponent, especially if he has left in their minds strong impressions or suggestive germs upon which their attention may feed. In the latter case you are being cheated out of what rightfully belongs to you. There is no need to permit this, as you have only to demand strongly in an intelligent manner the attention which belongs to you in order to receive it. If you permit the theft to pass by unnoticed, your case is thereby weakened while that of your opponent

⁴⁵ Edward Bradford Titchener,
A Beginner's Psychology, p. 102.

is strengthened in the same measure as your loss. This situation seems to occur more frequently than would be expected. It makes a strong lawyer stronger and a weak lawyer weaker. The real injustice of it, however, is that it does not permit the facts of both sides to receive equal and impartial consideration. Now that, in some small measure, we have had our attention called to the importance of attention to the lawyer, we shall proceed to observe the means by which an attentive attitude may be created in others.

The first factor we must consider is the condition of the person whose attention we are trying to obtain. We must do this before we consider the various stimuli which we may offer, as persons vary widely in their receptibility to impressions,⁴⁶ and otherwise we would not know what were the available openings for stimuli. That persons do vary widely in the attention which they give to stimuli is realized very clearly by the traveling salesman. The writer spent several years as a traveling salesman, and found that one appeal which would be received very attentively by one buyer would make no impression at all upon another. This situation is just as true in the courtroom, yet the lawyer does not realize it, probably partly because the lawyer takes it for granted that as the judge and jury have to be present they must be attentive. The traveling salesman, on the other hand, has to get attention in order to get the buyer even to pretend to listen to him.

It may seem rather odd to many, that one of the things we must consider about a person whose attention we are

⁴⁶ Walter S. Hunter, *General Psychology*, Rev. Ed., pp. 132-134; W. B. Pillsbury, *Fundamentals of Psychology*, Rev. Ed., pp. 278-284.

trying to get is his physical condition.⁴⁷ The temptation was great to omit entirely this factor in the situation, but an amazing illustration was recalled of an actual case in which it should have been considered but was not. In this trial one of the jurors was so deaf that he could hear nothing except the loudest of tones. This fact was manifest in the examination yet counsel on both sides permitted him to remain in the jury box and twiddle his thumbs while the evidence went over his head. Why this man was allowed to hear the case it is difficult to determine. Surely it must have been obvious that a man who can not hear can not pay attention to words, to say nothing of being able to make any decisions as to which party deserved the verdict. Many physical defects may prohibit normal attentiveness. If any of the senses are affected so that the impression, upon which attention depends, can not be transmitted to the brain, then there can be no attention to that impression. Any disease, and especially those common ones of headache and indigestion, may cause sufficient distraction to make attention fleeting. In general we may lay down the rule that any physical abnormality probably tends to lower the normal availability of attention.

Just a short time ago a case was tried in the District Court in which the question of attention arose and in which the question of physical abnormality should have arisen but was apparently concealed. In these days when

⁴⁷ For a discussion of the physiological conditions of attention see: William James, *Psychology*, Briefer Course, pp. 228-232; W. B. Pillsbury, *Fundamentals of Psychology*, Rev. Ed., pp. 268-272; Walter S. Hunter, *General Psychology*, Rev. Ed., pp. 143-146.

medical and manufacturing science has enabled the substitution of artificial for natural parts of the body the lawyer must stay wide awake. The case in question was a suit for personal injuries in which the plaintiff claimed that he had been negligently knocked down in the street by the automobile driven by the defendant. To all intents and purposes the case was of the ordinary type of negligence case in which one party said that one set of facts occurred and in which the opposite party said that a different set of facts occurred. The jury rendered a verdict for the plaintiff. I doubt very much whether the verdict would have been for the plaintiff had the jury known that the plaintiff had a glass eye on the side of his body which was struck by the automobile. Some lawyers were discussing the case several days after the trial. It seems that the defendant, not to be outdone in artificiality by the glass eye of the plaintiff, had a wooden leg himself. Fortunately, the wooden leg of the defendant probably did not affect his power of attention.

The glass eye of the plaintiff is in an entirely different category. The absence of one eye reduces the field of vision by about one-third. Thus the field of visual stimuli which might cause attention has been reduced in the same proportion. The worst feature, however, of having only one eye, from the viewpoint of attention, is that the visual stimuli received by the brain from one eye is not as accurate in detail as is the stimuli received from both eyes. One eye gives a flat visual image without depth, much the same sort of image you receive when you look at a picture on the wall. Two eyes give depth to vision because each eye sees the vision from a slightly different angle. Where

one eye is seeing only the front surface, the other eye is seeing enough around the corner to give the object depth as well as surface. The two different angles as seen by each respective eye are combined in the mind to form definite vision. Thus it is readily seen that if one eye is false the vision is partly gone, and the field of possible attention is considerably reduced. It may have been in this case that the automobile would have been in the vision of the plaintiff had he had two good eyes, but that it was just out of the vision of the only good eye which he had. Consequently there was no vision of the automobile to attract his attention.

Another personal characteristic which must be considered has to do with the attitude and ideas of the person at the time his attention is being sought.⁴⁸ We must know his state of mind, for it may be that his thoughts of other things are so entrenched that he can not lose them sufficiently to allow new impressions to claim his attention. Men of large business affairs frequently make poor jurors for this reason. They can not withdraw their attention long enough from their own affairs to listen carefully to a long string of evidence. In the same classification come those who have recently suffered a severe mental shock, such as the loss of a close relative. They find it very difficult, even impossible, to confine their attention to another matter, although they exert their will powers to the limit. People possessing strong convictions, particularly when they believe that they are right and that you are wrong, can not

⁴⁸ W. B. Pillsbury, *Fundamentals of Psychology*, Rev. Ed., pp. 279-281; Daniel Starch, *Principles of Advertising*, p. 615.

give fair attention to arguments which run counter to their opinions. The foregoing illustrations of momentary mental conditions, which hinder attention, serve only to put one on guard to watch for similar conditions. When the trial lawyer finds a person who is mentally incapable of normal attention, the best procedure is to excuse that person if it be possible without injury. When the person can not be dismissed the only course open is to use as strong a stimulus as possible in the hope and with the possibility that it may, because of its force, draw the attention in spite of the impediments.

Not only, however, do the present ideas of a person at times affect his attentiveness, but even past experiences may play a similar role when they have left their imprint on the mental structure.⁴⁹ Past associations or environmental influences frequently have so moulded a person's possible thoughts that the person will have an abnormal attentiveness to facts which find ready association with old ones, while the person will have a subnormal attentiveness to facts which find no connecting link already formed in the brain. Thus, for instance, the training of a lawyer is such that it makes possible an abnormal degree of attention to legal matters. On the other hand a person who had been trained to disregard certain matters, particularly of details, finds it very difficult to give normal attention to those matters.

Let us now change our viewpoint and approach the subject of attention from a more practical angle. For several

⁴⁹ W. B. Pillsbury, *Fundamentals of Psychology*, Rev. Ed., pp. 281-284; Walter S. Hunter, *General Psychology*, Rev. Ed., p. 134; Daniel Starch, *Principles of Advertising*, p. 615.

pages we have been considering the individual whose attention we were trying to obtain. There we saw that certain individual characteristics, either of a mental or physical nature, might affect or change normal attentiveness, but it did not lead us to the heart of the problem. Attention is a twofold matter. It depends not only upon the subjective factors of the person whose attention we are seeking, but it depends on the objective factors which we offer.⁵⁰ We must furnish some stimulus or some impression which will cause the other person to focus his consciousness upon it. Otherwise we can neither attract nor hold attention. There are many kinds of stimuli which we may use. The mere sight of us may attract attention as when we meet a friend while walking down the street. If we desire the attention of a doctor we go to see him and tell him our ailments. Suppose, though, that a jury has been listening to a case for several days, and suppose that it is one of those cases in which the evidence itself is not particularly interesting to them. Suppose further that their attention is wandering. What must we do to hold their attention? Merely taking a recess, unless they are fatigued, will help but little, if any. Can we hold their attention by talking louder or less loud, by slowing up matters or by hurrying them along, by repeating certain evidence, or by using gestures as well as talking? What means have we to use?

The kind and duration of attention which we receive depends (aside from the subjective factors) upon the characteristics of the stimulus we offer.

⁵⁰ W. B. Pillsbury, *Fundamentals of Psychology*, Rev. Ed., p. 277; Daniel Starch, *Principles of Advertising*, p. 615.

Some of the most important attention securing characteristics of a stimulus are

- | | |
|---------------|--------------|
| 1. Intensity | 5. Movement |
| 2. Extensity | 6. Isolation |
| 3. Duration | 7. Contrast |
| 4. Repetition | 8. Interest. |

By intensity we refer to the force of the stimulus.⁵¹ A peal of thunder will compel attention where a lesser noise would not. The bright lights of a big city draw trade away from less well lighted districts. Any stimulus, if strong enough, will compel attention. In the courtroom it is sometimes advisable to use an intense stimulus where you want to create an intense emotion. It is seldom, if ever, advisable, though to roar at a jury as some lawyers do. Few juries appreciate such a procedure. A loudly spoken word or phrase if appropriately placed may serve to retain waning attention, but no more than a few words at a time should be used. The best way would seem to be to work up to the climax step by step in an orderly manner, until, at the finish, the attention is literally "glued to the spot." One proper place in which it is necessary to use an intense stimulus is in those cases where there are conflicting intense sensations. Then the only way to get attention is to offer the more intense impression yourself.

⁵¹ Daniel Starch, *Principles of Advertising*, pp. 615-622; Harry Dexter Kitson, *Manual for the Study of the Psychology of Advertising and Selling*, p. 29.

Extensity has to do with the number of channels over which the stimulus travels to reach the brain.⁵² If the stimulus is a combined one of sight and sound it has more opportunity to draw attention than if it were one of sight or sound alone. Thus lies the force of gestures in addressing the jury. Words alone would reach only the ears. Gestures are seen by the eyes. When both sensations reach the brain simultaneously the effect is greater than that which either sensation would produce singly. Not only is it greater, however, but it is more likely to attract attention to begin with. In crowds I have seen persons not only call, but wave their arms in order to attract the attention of others. The use of this rule of extensity seems to find its most valuable application in the courtroom not in getting attention but in sustaining it. A lawyer may address a jury, using words without gestures, and for a time hold the attention. If he is one of the favored few possessing remarkable diction, he may be able to hold the attention for quite a period of time, but if he is one of the average he will find that it is much less of an effort to hold the attention of the jury or judge if his words are accompanied by meaningful gestures. It is easier to listen to many words if part of the meaning is conveyed by some other sense than that of sound alone.

There are two parts to the rule of duration. The first part states that the longer a stimulus is continued the more

⁵² Extensity is really but a subdivision of intensity and follows the same principle. Where a number of stimuli, traveling over different channels, combine to arouse attention, the result is caused by the greater intensity of the combination.

likely it is to receive attention.⁵³ The second part states that the stimulus must constantly vary in order to hold attention after it is once obtained.⁵⁴ The first division seems almost too obvious in application to need explanation. Suppose a person is "deep" in a book. If you speak to that person he may not hear you at first, but if you continue speaking you will probably secure his attention eventually. So it is with other instances. At the time you first present your stimulus there may be some more powerful stimulus attracting the attention elsewhere, but if your stimulus continues the chances are that yours will become the most powerful at some time. The second part of the rule of duration, namely that the stimulus must constantly vary in order to hold attention, is more important to the lawyer. Unvarying stimuli create monotony and prevent sustained attention. Time is the essence of attention just as it may be the essence of a contract. Attention at best is like an alternating current of electricity. It is not steady. It can not be. It fluctuates widely. Voluntary attention can only be maintained for a few seconds at a time to an unchanging stimulus.⁵⁵ No one can attend continuously to an object that does not change in some particular. The attention must constantly seek some new phase or side of an object to attend continuously to it. Some change is always taking place in a law suit, but the change may not be rapid or wide enough to hold attention. Many are the inattentive and

⁵³ The operation of the rule of duration is very similar to the operation of the rule of repetition.

⁵⁴ William James, *Psychology, Briefer Course*, p. 225.

⁵⁵ William James, *Psychology, Briefer Course*, p. 224.

bored judges who have sat upon a bench. It is then the lawyer's function, if he desires the continued attention of the jury or judge, to create as many changes as possible which are not inconsistent or harmful to his case. Any type of change is beneficial whether it be in counsel, in voice, in type of evidence or in witness. There must be some change however. Nothing creates fatigue, monotony and wandering attention quicker than sameness of stimuli.

The fourth law of attention is that of repetition.⁵⁶ In a law suit repetition may be made a particularly powerful weapon. The constant pushing forward of the appeal now in this form and now in that, produces the double effect of attention and suggestion. Repetition is a means by which attention may be attracted; it is a means by which attention may be held, unless it is used to the extent of producing monotony. Then it becomes harmful. We see the law of repetition no more definitely employed than in the advertising methods of prominent business concerns. Day after day, and month after month the advertisements are placed so that they will best attract our attention and induce us to purchase the wares. The same practice may be successfully used in the courtroom. At every available opportunity the appeal should be repeated so that it may receive the most attention and consequently make a lasting impression which will extend to the jury room.

The fifth rule of attention states that movement is a strong stimulus for attention.⁵⁷ "In the distant days when

⁵⁶ Tipper, Hotchkiss, Hollingworth and Parsons, *Advertising*, 2nd Ed., p. 121; Harry Dexter Kitson, *Manual for the Study of*

the Psychology of Advertising and Selling, p. 52.

⁵⁷ Daniel Starch, *Principles of Advertising*, pp. 627-634.

man's progenitor stalked in the jungles one of the most important factors in life was movement. The lightest flutter of a leaf might indicate the presence of a hidden enemy; the flicker of a twig might signify lurking death. As a result our ancestor was obliged to give close attention to everything that moved. If he failed he would have fallen victim one day to the destructive forces surrounding him."⁵⁸ This situation is true today. Almost without realizing, we pay attention to things which move. This is true in the courtroom. A person enters, leaves, rises or sits down and we notice it. Usually, however, unless the movement has some interest we do not continue our attention. We allow it to wander back to where it was before or to something else. Thus we may draw the conclusion that movement causes attention but does not hold it unless the movement is interesting. Movement in court harms more than it helps, for the attention which it causes is only to the movement and not to vital matters. About the only valuable use it has is to interrupt the attention from something else, so that there is an opportunity at the end of the movement to shift the attention by further stimuli to the matter where attention is desired.

The sixth rule states that the amount and duration of attention given one situation depends upon the isolation of the situation, or its competition with other situations for the attention.⁵⁹ If two lawyers start arguing to the judge

⁵⁸ H. D. Kitson, *Manual for the Study of the Psychology of Advertising and Selling*, p. 34.

⁵⁹ Daniel Starch, *Principles of Advertising*, pp. 622-627; Bernard C. Ewer, *Applied Psychology*, pp. 184, 185.

at the same time, can the judge give either of them as much attention as he could if they argued one at a time? When we attend a three ring circus do we give each ring the attention we would if it were the only ring? Thus the lawyer must realize that in order to secure the greatest amount and duration of attention, he must prevent or avoid competing stimuli.

The seventh law of attention relates to contrast,⁶⁰ and blends very readily into the law of change. All life requires variety. When variety ceases life becomes a bore, and attention is impossible for we have nothing but monotony. Contrast is useful not only in obtaining attention but in holding it as well. The contrast may be in any particular, as in appearance, attitude, personality, tone of voice, or what not. A contrast in tone of voice is usually very effective in court. Instead of using a constant tone, which would tend to monotony, the voice may be allowed to rise and fall, sharply or gradually as the situation may warrant thereby stimulating and holding the attention not to the contrast but to what is being said. Contrast in attitude may also be judiciously employed to advantage. From a peaceful appearance I have seen counsel rise to righteous indignation with great effect and with lasting impression.

The eighth and last rule of attention states that interest is a good basis for attention.⁶¹ We may secure attention, and we may hold it with other means, but the best way is

⁶⁰ Daniel Starch, *Principles of Advertising*, pp. 634-637; Harry Dexter Kitson, *Manual of the Study of the Psychology of Advertising and Selling*, p. 43.

⁶¹ Bernard C. Ewer, *Applied Psychology*, pp. 186, 187; Harry Dexter Kitson, *Manual for the Study of the Psychology of Advertising and Selling*, pp. 57-79.

to develop an interest. All persons in a trial usually have some interest in it. Counsel and parties are interested in winning; the jury may be simply interested from the standpoint of curiosity; the judge is probably interested in getting it over with; the witnesses in seeing their side win or in telling as little or as much as possible; and the spectators are interested in watching what goes on. Whether counsel can build up an interest for his case, whether it be an emotional one, such as pity or injustice, or whether it be one of reason depends largely upon the amount of sustained attention he will receive. The best interest is a genuine interest and not one created by fawning upon the judge or jury. It may be all well and good for the street fakir to create interest by praise and flattery, but such procedure has no place in a court of law.

This completes our treatment of the subject of attention. We will leave it with the hope that its importance is fully realized and that enough of its application is understood to enable counsel to employ it to advantage in his work. He should know how to apply its rules not only to control the attention of those in court, but also to control his own attention.

7. Personality.⁶²

We have discussed a number of specific mental states and processes such as reason, volition, memory, imagination and

⁶² The lawyer is referred to the following references for additional information upon this subject: Horatio W. Dresser, *Psychology*, pp. 142-155; A. Myerson, *Foundations of Personality*; C. A. Strong,

Origin of Consciousness; Julia Turner, *Psychology of Self-Consciousness*; F. B. Jevons, *Personality*; R. S. Woodworth, *Psychology*, pp. 552-571.

the like. Now we will add them all together, and call the total, mental personality.

Physical personality (though mentally realized and largely mentally created) claims its part as well. It comprises all those peculiarities of the body, such as size, shape and color, and also such inanimate things as clothing which are closely associated with the body. General personality is the result of the blending of both the mental and physical parts. It is the sum total of our being by which we express so many individualities. It is the unitary impression created by the interaction of all factors of ourselves. Those around us know us by this total quantity. They do not know us by an individual mental or physical trait except where the trait is so strong or noticeable as to exercise a marked or predominating influence on general personality. Even then the trait is often mistaken for the combination.

As personality is a combination of lesser parts, so it depends upon the number and strength of the parts comprising it. Nearly all persons have some evidence of possessing a very similar number-in-kind of parts. This places upon the strength of the individual parts the burden of making possible all the wide gamut of personalities that there are. The burden is well placed, however, for difference in strength of inherent or available factors does account for most of the variations. We are referring now particularly to mental personality. Quite obviously physical characteristics change from birth until death and are not present alike in all persons. A familiar illustration of the change of personality due to change of mental traits is that observed as

the result of a course of study. We may observe the result in a greater power of reasoning, in the formation of studious habits, in the changing of positions of livelihood, or in any one of a number of other manifestations. Note also the still more common illustration of the change of personality due to physical changes. A person ordinarily of quiet and jovial disposition may become grouchy or morose when sick, so that he radiates an entirely different atmosphere from that when well.

There comes to the mind of the author a most vivid, most unpleasant, and most remarkable instance of change of personality which he witnessed some years ago. The subject of the change of personality was a mature man who is now dead having been electrocuted in the name of justice. Four men had been indicted for the killing and robbing of a prominent man about town. Each of the accused was tried separately. The first one to be tried was the man who, according to the evidence, fired the fatal shot. It was particularly noticeable that for a man being tried for first degree murder the accused seemed surprisingly carefree and unconscious of the possibilities of the case. This confidence was without foundation as he was promptly convicted in spite of the efforts of one of the best lawyers to save him. Several months later this man was brought from the death cell to testify in the case of one of his fellow conspirators. What a striking change of personality he presented. Already it seemed that death had partly claimed him; already the face had taken on the ashen hue; the staring, unseeing eyes seemed glassy; the pallid lips moved but the sounds were weak; there, slumped

in a chair he sat, a man whose personality had already preceded him to the grave.

There can be no doubt but that personality spells either failure or success for the practicing lawyer. If he has not an engaging or winning personality as determined by the standard of those from whom he would draw business, he had better seek some other avocation where his personality would fit. In no other position is the proper personality so necessary as in building up a practice, and handling it after it has been built up. No client runs after a lawyer to handle his cases unless he feels that the lawyer has the personality to win for him.

Doubtless many men enter the legal profession who are not at the time of their admission suited by personality to follow it. Either they drop by the wayside or they change their nature to meet the standards required. This change often is the result of experience of the continual rubbing of shoulders with clients and courts. Frequently the change is accompanied with jolts and hard knocks. Then the process is more rapid. But the change may take place by conscious effort following an introspective self-analysis. As change of parts makes change of whole, so we must know what parts need changing before we can change the whole. It is much like making up an asset and liability statement for a business. Both require detailed inspection before healthy conclusions and results can be obtained.⁶³ The opinions of others, rather hostile than friendly, are very

⁶³ Howard C. Warren, *Elements of Human Psychology*, pp. 364, 365.

valuable to observe apparent weaknesses. We can never depend on friends to point out defects. We can always depend on enemies, for it is their delight to tear us down. We must simply realize, however, that usually both friends and enemies exaggerate our virtues and vices, respectively.

If it might not be thought that we were preaching we would be tempted to call attention to many places of improvement in personality such as dress, bearing, character of speech and the like, but we will leave the details of analysis to the reader, for if he conscientiously desires to, he may readily become aware of the possibilities of personality.

8. Confidence.

Confidence is that feeling of self-reliance or assurance of mind whereby dependence is placed in one's own powers and resources. Cicero says it is that feeling by which the mind embarks in great and honorable causes with a sure hope and trust in itself.

This sincere belief in one's own ability, which is confidence, may be the result of faith in mental or physical powers. The lawyer, for instance, enters the courtroom with an overpowering confidence in the side of the case which he represents, not because of any physical strength which it has, but because he knows that its mental appeal will win. The athlete, on the other hand, enters his contest with faith not mainly in mental superiority; but primarily in the strength and endurance of his muscles. The lawyer and the athlete have the same feeling of confidence. The confidence of the lawyer is, however, based upon reli-

ability of mental powers while that of the athlete is based upon physical ability.

Introspectively analyzed we find that confidence is composed of three main characteristics, namely, familiarity, absence of fear and will. In the form of an algebraic formula this would read:

Confidence=familiarity—fear+will.

All three parts are essential components to balance the equation. If one is missing then immediately there is falsity.

We will consider the first characteristic of confidence, namely, familiarity.⁶⁴ No one can have true confidence in anything with which one has neither an actual nor a presumed familiarity. Where such familiarity or intimacy does not exist, there is a feeling of fear,⁶⁵ strangeness, newness or anxiety which is fatal to confidence. Possibly this is one of the reasons why an advocate had best cite an old rule of law in support of his case rather than to have a new rule of law created.⁶⁶ The familiarity, which is a part of confidence, may be that resulting either from the recognitions of past happenings, from the imaginations of future possibilities or from ignorance. Past recognitions are but the intimacies of memory. They are but the re-creation of former acquaintances in familiar garb. It is logical, then, that assuming other necessary qualities to be present, one might have confidence in one's ability to meet a situation

⁶⁴ For a description of familiarity see Howard C. Warren, *Elements of Human Psychology*, pp. 183, 184. See also Edward Bradford Titchener, *A Beginner's Psy-*

chology, pp. 178, 179.

⁶⁵ I. Edman, *Human Traits*, p. 127.

⁶⁶ John C. Reed, *Conduct of Law Suits*, 2nd Ed., pp. 112, 113.

which had created a previous impression, which was remembered and which had now reoccurred.

Take the case of familiarity due to imagination. Here the situation is a little more complex. In a previous chapter we learned that imagination was of two kinds; productive, in which the images bore no apparent similarity to past experiences, and reproductive, in which the images were directly traceable to past experiences. Reproductive is substantially pure memory, so we shall give our attention to productive. Productive imagination is a basis for the familiarity upon which confidence depends, because by its use one is enabled to create present ideas of future possibilities by drawing upon the store of past images. Thus a future situation becomes familiar and intimate, not because it has happened previously but because the mind can look ahead by the use of past experiences, and can predict what future situations will be like. One may consequently have confidence to meet a new situation because the imagination has been used to determine and to make familiar the possibilities of what may happen. The future under such a procedure, becomes the present and known. At least for the purpose of confidence the future is believed to be the familiar.

At times familiarity may be based upon unperceived ignorance. Then the familiarity is not actual, only presumed. The confidence upon which this type of intimacy is based would probably receive its due if it were called conceit. When one has confidence based upon this condition, knowledge is taken for granted when in reality it does not exist. This kind of confidence is more general than might be supposed. Any lawyer who goes into court con-

fidant that he will win bases at least part of his confidence upon his ignorance. Thus, sometimes, the tyro will have confidence where the experienced advocate would not be so sure of himself.

The second necessary characteristic of confidence is the absence of fear. Where fear is present there is likely to be doubt, question, hesitancy, uneasiness and timidity,⁶⁷ in the face of which confidence can not exist. Few of us seldom experience actual fright, yet modified fear accompanies many of our life tasks. The fear of poverty, of old age, of death, of the super-natural, the fear of displeasing others, and the fear of awkwardness, are a few of the manifestations inherent in all in a more or less modified degree. In conflict with these, confidence is shaken or is lost. The absence of fear, then, is a requisite to the presence of confidence. The lawyer who is afraid of his opponent, or afraid that his evidence will be shaken, or afraid that the judge will be hostile will have little confidence in his ability successfully to secure the verdict.

The third and last necessary characteristic of confidence is the positive one of will. This is true because will is the power of making decisions among possible alternatives, and carrying out the decision.⁶⁸ Unless one can make up one's mind as to what to do and to do it, one can have no confidence in one's ability to perform the particular act. Only where there is will power can there be assurance and courage that ability is present to meet the situation. Like fear,

⁶⁷ Edward Bradford Titchener, *A Beginner's Psychology*, p. 179; Howard C. Warren, *Elements of Human Psychology*, pp. 212, 213;

William James, *Psychology, Brief-er Course*, pp. 385, 386, 407-414.

⁶⁸ Walter Dill Scott, *Psychology of Advertising*, p. 195.

the absence of will power causes timidity, and causes a person to draw back from distasteful situations which require initiative. Little further need be said regarding will power, as its characteristics have been previously explained. We will then proceed to a further discussion of the feeling of confidence.

Confidence may be developed in many ways. Theoretically it may be developed by improving knowledge to cause familiarity, by inhibiting fear and by improving the will. Practically, also, these methods will help. A better trained lawyer is, other things being equal, more likely to possess a greater degree of confidence than will a lawyer not quite so well trained. The instinct of fear can not be entirely eradicated, yet it may be modified so that it will hinder confidence less and less. Indeed, attention to fear may be inhibited by the consciousness so that fear will only be felt in its extreme manifestations and this rarely occurs. The will also may be made to function more vigorously as we have already stated in this chapter. It may be developed to a dominant position whereby confidence will find greater courage and resourcefulness to expand and grow. These three parts may undoubtedly be used to create and improve confidence, yet the process of improvement may be more clearly observable if expressed in popular language.

Nothing helps self-confidence more than does success in any task which presents itself. The meeting and the overcoming of obstacles lends a healthy glow to confidence, re-enforcing it with each succeeding victory, so that in proportion the losses are scarcely felt. When the confidence, which accompanies success, repeats itself a sufficient num-

ber of times there develops a real habit of confidence. True, this confidence, when developed to a pronounced degree, may not always be warranted and may not always be responsive to the cause, yet it is no less beneficial on that account. When confidence becomes a habit it may accompany situations where confidence is really a vain thing, yet it prevents a man from being downhearted, and it helps him to maintain the power to attack the next problem with courage unimpaired.

Confidence is a wonderful trait for a lawyer to possess. It enables him to use his full energies to meet his problems. It does not hinder him as would its absence. It is an encouragement. It smooths the rough points, and makes the end seem clear and certain. It enables him to push forward, and to rise in the profession. Last, but not least, it enables him to build up a practice and to hold it after the construction costs have been paid.

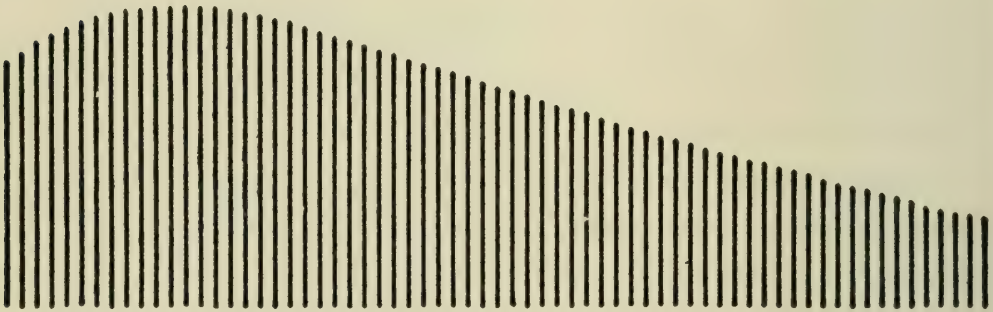
9. Fatigue.

Fatigue is a condition of human weariness. It has been defined as a decreased capacity for work,⁶⁹ yet in reality the decreased capacity for work is but one of the results of it. A more accurate definition would be that it is a change in the chemical composition of the body whereby the store of energy producing materials is consumed, and whereby waste materials accumulate more readily than they can be thrown off.⁷⁰ This chemical change has been shown by experimentation to follow all exertion.

⁶⁹ Hollingworth and Poffenberger, *Psychology*, pp. 186, 411, 412; *Applied Psychology*, p. 138.

⁷⁰ Bernard C. Ewer, *Applied Psychology*, pp. 139-141.

Fatigue may affect either the mind or the body, but usually when one is affected the result will carry over and affect the other as well. This latter condition may account for the somewhat questionable attitude as to whether there is any real mental fatigue in the true sense of the word.⁷¹



Fatigue curve of a muscle. The vertical lines record a series of successive contractions of the muscle, and the height of each line indicates the force of the contraction. Read from left to right. (From Woodworth, *Psychology*, p. 73.)

We may be sure, however, that part of all mental fatigue is really physical fatigue, at least in so far as the working of the mind depends on the physical condition of the brain substance.

The more vigorous the activity the more rapid will be the progress of fatigue. We know that a man will tire more quickly when he runs than when he walks. We also know that he will tire more quickly from study than from mere reading. There is a difference, however, in the rates at which mental and physical fatigue proceed. The mind is

⁷¹ Bernard C. Ewer, *Applied Psychology*, p. 412; I. Edman, *Human Traits*, pp. 77-80; Hollingworth and Poffenberger, *Applied Psychology*, pp. 141-143.

able to undergo continuous work with a much less rapid loss of efficiency due to fatigue than are the muscles.⁷² There is a good reason why physical labor should have a fair onslaught of fatigue. Man might be inclined to exceed the limits of endurance. He might soon wear himself out, and greatly shorten his life if there were nothing to say stop. As it is, fatigue acts as a safety valve, and compels a slackening of speed when the danger mark is reached.

Everyone is subject to fatigue. The laborer in the factory, the accountant with his figures, and the lawyer with his legal problems become afflicted with it. No one who leads an active life can altogether escape its influence. Some may, like Edison, seem to have less of it than others. The patent medicine fakir with his wonderful cure-all, furnishes us with an excellent illustration of the universality of fatigue. To the long list of horrible diseases for the relief of which the concoction is a specific, we find the fakir adding "that tired feeling." By so doing he is sure that every listener is a prospect for all get tired at times.

Fatigue certainly does play havoc with the mental processes. It dulls them all. Take the case of memory, for the purpose of illustration. Memory is at once weakened. The past becomes hazy. All lawyers have seen this situation in the courtroom. A witness, after having been on the stand for several hours under a gruelling cross-examination, will have failure of memory. Inconsistencies sometimes occur between the direct and cross-examination from this very cause. At first the memory was fresh and ac-

⁷² Arthur I. Gates, *Psychology for Students of Education*, p. 381.

curate, but as fatigue progressed things became dimmer and dimmer until things were entirely forgotten. If counsel wants to entangle a witness he has only to wear out the witness. Then the brain will be dull, and the lines of communication will cease to function properly. The big danger to the lawyer is that he will fatigue himself, and thereby weaken his own memory. When this does occur there is nothing to do but to gain some respite whereby recuperation may take place. Fatigue plays the same tricks with the attention that it does to memory.⁷³ There may be little noticeable result at first, but as the degree of fatigue increases there will be a compounding of effects. It is difficult to give any fair degree of attention when tired. This is especially true when there is little interest in the subject matter anyway, as is frequently the case with jurors. Any little distraction will lose the attention and send it wandering away. At best attention is so wary to get and hold that fatigue usually presents an insurmountable obstacle.

In a similar manner fatigue affects all of the mental processes. It weakens the will,⁷⁴ it causes fallacious reasoning and it dulls thinking. Even the senses by which impressions are received for transmission to the brain become less reliable. Thus the necessary adjuncts to the brain further hinder normal mental action.

⁷³ Bernard C. Ewer, *Applied Psychology*, p. 186.

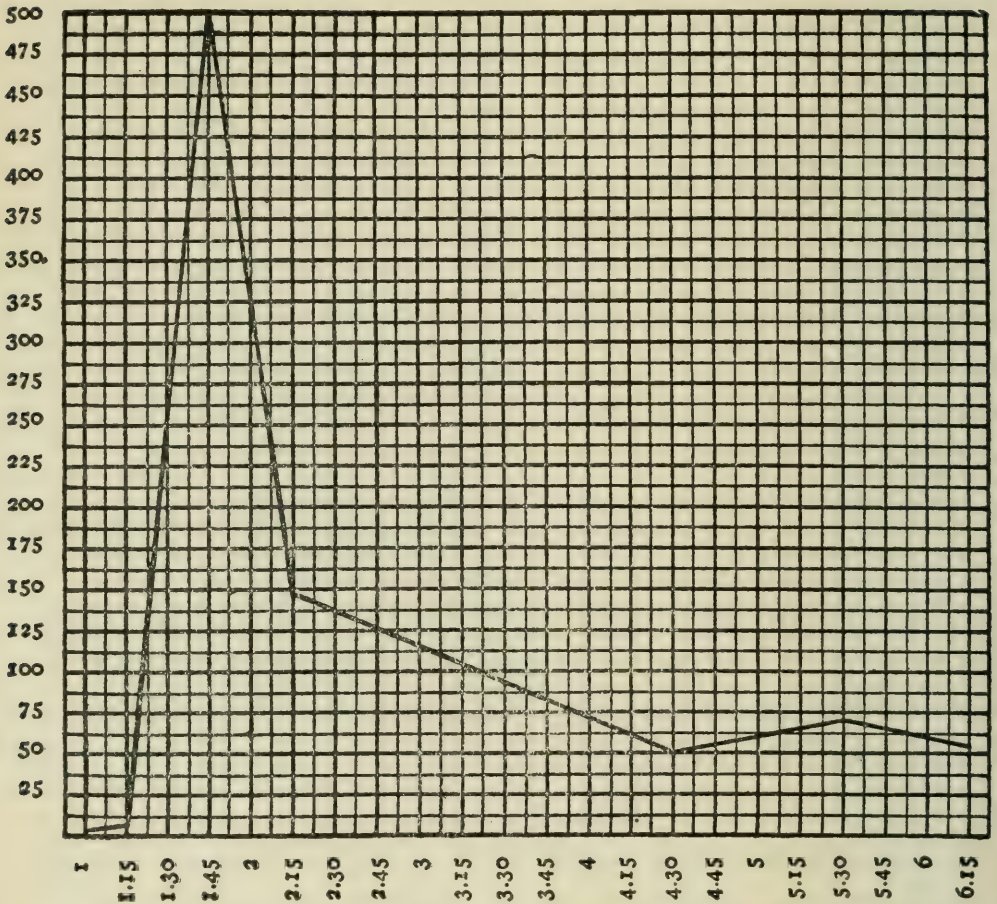
⁷⁴ Bernard C. Ewer, *Applied Psychology*, pp. 251-255.

There is but one remedy for fatigue, and that is a period of inactivity.⁷⁵ Then the body may again store up energy-producing materials and may carry off the accumulated waste products. The best period of inactivity for overcoming fatigue is sleep. Then the process of recuperation is most rapid. Any rest form will furnish some relief, however. If the fatigue is localized, it may be overcome by resting the part affected, even while the balance of the body is being exercised. Thus, a mechanic will use one arm until it becomes tired, then switch over and use the other one, only to return to the first when the second becomes fatigued.

In most instances the economical method of avoiding fatigue is to have a number of short work periods and a number of short rest periods, rather than to have one long period of each. In this manner the system may be kept at highest efficiency during the entire working time. The small door-bell dry battery seems almost human in its analogy here. If the battery be used constantly without interruption it may, let us say, have a life of fifty hours. If it is used in intermittent service, however, its life may be doubled or trebled, and it certainly will give better service all the time.

The lawyer will find that one way to reduce fatigue in intellectual activities is to increase practice and skill. The inexperienced lawyer, unaccustomed to the routine of a

⁷⁵ Coleman R. Griffith, General Introduction to Psychology, pp. 442, 443; Hollingworth & Poffen-berger, Applied Psychology, pp. 147-155.



Curve of intensity of sleep according to Monninghoff and Piesbergen. The figures along the abscissa represent time in hours from the beginning of sleep; those along the ordinate, the relative intensity of sleep measured in milligram-millimeters, expressing the intensity of a falling body necessary to awaken the sleeper. (From *Depth of Sleep* by Howell in *Readings in General Psychology* p. 664.)

practice, will consume more energy in doing the same task than would an old experienced head.

In the courtroom we find genuine fatigue, but there is also pseudo fatigue. The latter appears to be real fatigue, and is frequently mistaken for it yet it is not.⁷⁶ It is like the man who says he is tired of waiting. He is not really tired. He may simply be bored. He does not like to wait. A complete change of atmosphere to a congenial environment would at once dispel any thought of fatigue. A witness or a juror who is impatient to get away, or who is bored will soon show symptoms of fatigue. This situation is as dangerous as if real fatigue existed, but it may usually be remedied with a period of change probably of intermission.

Counsel may sometimes employ fatigue as an effective weapon for weakening opposition. A tired opponent is less to be feared than one who is rested and alert. Some lawyers lose no opportunity to keep their opponents on the jump. Discouragement may be attempted first, because a discouraged man tires more easily. On the other hand if they can encourage themselves they can carry on for longer periods. One of the advantages of having several counsel on a side is that the mental and physical work of the trial may be distributed among several instead of placing the entire burden upon one. When there is only one counsel against several, the one must use all opportunities during a long trial to recuperate and rest.⁷⁷

⁷⁶ Bernard C. Ewer, *Applied Psychology*, p. 186.

⁷⁷ The lawyer who is interested in a more detailed research into and study of the psychology of personal efficiency is referred to the references given in the bibliography at the end of the book. Among these we might particularly mention the following: W.

F. Book, *Learning How to Study and Work Effectively*; H. D. Kitson, *How to Use Your Mind*; W. B. Pillsbury, *Education as the Psychologist Sees It* (this book has particularly good chapters on the cultivation of attention and memory); E. J. Swift, *Psychology and the Day's Work*.

CHAPTER VIII

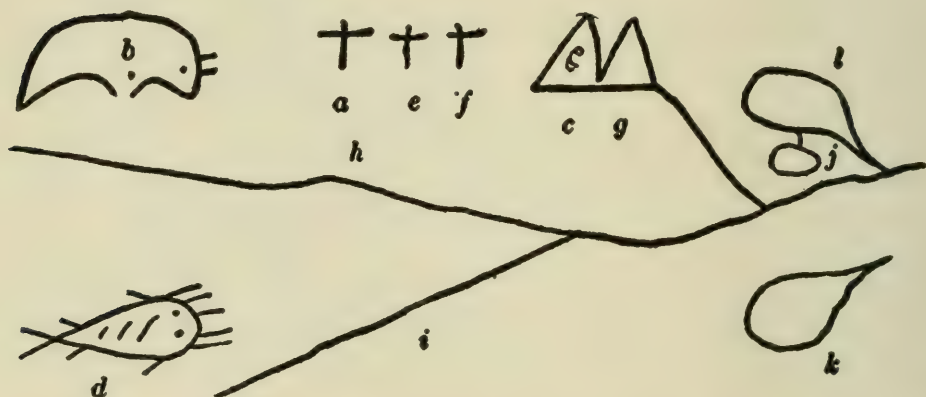
WORDS

Words are the principle means by which we express the contents of our minds. The sensory apparatus, being the organs of sight and sound in this case, is so constituted that the sight of a word to the eye, or the sound thereof to the ear creates an impulse which is transmitted along nerve paths to the brain. Upon reaching the brain the impulse creates an impression corresponding to the experiences heretofore suffered in connection with the word. Words are purely psychological tools. They are extremely useful ones to the lawyer.¹ Our present day ideas would immediately cease were there no words to express them. We would have no law courts, no lawyers, and no ham-and-eggs for breakfast.

These things are apparent when we examine the function of the lowly word. Words were created to give expression to some mental action. The dog has created sounds which we presume designate such states as hunger, fear, anger, lonesomeness and the like, but word sounds are the result of human consciousness and social contact. A man, if kept alone, even after he has become proficient in the use of words will tend to forget them, and will fail to use them. Words were created to act as a vehicle or carrier

¹ A very interesting discussion of language in relation to law is found in *Criminal Psychology* by Hans Gross, pp. 287-300.

of ideas from one mind to another. If there were no person to receive them, there would be no need for words. That a word is a mere tool or carrier is obvious when we consider that inherently, in and of themselves, words mean nothing. They are composed of inherently meaningless letters which we combine in various ways, and to which combinations we delegate some meaning. I open my French book to the



An Ojibwa love letter, recorded and explained by Garrick Mal-
lery in the Annual Report of the Bureau of Ethnology. The writer, a
girl of the Bear totem, b, summons her lover, who belongs to the Mud
Puppy totem, d, along the various trails indicated, to the lodge, c,
from which the beckoning hand protrudes. The inclosed figures at
l, j and k are lakes. The crosses indicate that the girl and her com-
panions are Christians. As found in *Written Language* by Judd in
Readings in General Psychology, p. 380.

word "loi." If you have never seen the word before, you
can scarcely get the idea as to its meaning. Does it con-
vey to your mind the meaning it would to the mind of a
person who understood French? It does not. It has no
inherent meaning. The French have delegated to it the
same meaning which we attach to the word "law."

Words are not only, however, a means of transmitting ideas, but they are a means of securing the attention of the person to whom the thought is directed, for sounds, sights and contrasts such as are created by language are some of the means of securing and holding attention. A word might in a measure be likened to a burglar's jimmy. The purpose of both is to "get-in."

In the third place words are the mechanics of thought. We think only in terms of words, and our thoughts are limited to our vocabulary. Possibly you have heard a man say that he could not find words to express his thoughts. You may be sure that he has not the thought, if he can not find words to express it. They go hand in hand. The only way to acquire new thoughts is to learn new words or to reshape the old ones into new combinations. If a man can not comprehend your words, he can not understand your thoughts. This fact has sometimes been taken advantage of for the purpose of creating a so-called "impression," as when you hear a man quote Greek to people who do not understand it. I remember reading an anecdote told of a clever lawyer who won his case before an ignorant, easily flattered Justice by basing his argument upon a Latin quotation, the meaning of which neither knew.²

The study of English is indeed but the study of psychology, yet it is infrequently treated as such. Usually it is developed purely as an end in itself, although it is but the means of thought, and the transmission thereof to others. Words, however, do not always have the same meaning to

² J. W. Donovan, *Skill in Trials*,
2nd Ed., pp. 122-124.

all people. In our own introspective processes of thinking this does not bother us a great deal, for it does not matter much in our own reasoning whether we use other peoples' meanings or not for words, so long as we know what meaning we use. In the transmission of thoughts, however, the danger lies.³ Words must be used which will really carry to the person the idea we wish him to receive. Otherwise, language is futile. Language always aims at some effect. Our language and the meanings given to it must then be suited to our listeners. This is very important to a lawyer, as frequently the technical meaning which the law gives to a word is not the popular meaning which the jury understands. The occasion, also, should modify the use of words.

The law has received considerable criticism because it has taken popular terms and given them a technical legal meaning. In his book on *Psychology Applied to Legal Evidence*, Arnold devoted several pages to an attack on the law for this very reason. In part he says:

"But even more mischievous than the employment of actual fiction is the assignment of arbitrary meanings to terms which conflict with the sense in which they are usually employed by the plain man. Such a use of ordinary language must necessarily mislead and also contribute greatly to the artificial and technical character of the law. As examples of such terms will be found throughout this work, we need only specify here the use of words like 'malice,' 'intention,' 'fraud,' 'wilfully,' 'person,' 'thing,' and

³ Henry Austin Aikens, *Principles of Logic*, 2nd Ed., Rev. Ed., pp. 13-35; Hans Gross, *Criminal Psychology*, p. 287.

then pass on to the admissions of legal writers on the subject and the reasons why such employment of language in our view must be disastrous. The attitude of lawyers in this matter, if we are not mistaken, is to assert that they are at liberty to give what meanings they like to words, and by fixing such meanings with exactitude they will arrive at clearness and certainty. To this they consider a technical vocabulary to be a great aid. On the other hand, some legal writers at all events are constrained to admit that you can not attach successfully to words meanings different from those which they bear in ordinary use. As regards technicality of language, we are not sure whether they regard it as a blessing or an unavoidable evil, but we believe them to hold that they are under no obligation to make it intelligible to the non-legal mind, and, if it results from the employment of technical phraseology that the law is not understood by the people, this may be ignored, * * *. It is difficult to understand how in such circumstances they can justify the use of their maxim that 'ignorance of the law excuses no one,' except in so far as it may be regarded as a supreme fiction."

With such a situation substantially true as regards written laws and our forms of procedure, a duty falls firmly upon the lawyer to interpret for the layman, whether client, witness, or jurymen, the technical language of the law so that the meaning may be understood by the layman in his own popular language wherever it is possible.

Eloquent words, flaming with passion, would probably be entirely out of place, and would create an undesirable impression in a suit on a promissory note. In the army I recall

that the mule skinnners had a forceful language all their own, which I will not endeavor to quote, but which I assure you they thought was quite the most appropriate to the occasion and the audience. At times slang gets over and at other times it is very weak.

There are many ways in which words may be divided for the purpose of classification. In this chapter I have endeavored to divide them and their combinations into such groups as seem most useful to the members of the bar.

"Part of our mental content is made up of objects in the material world, which we have perceived through the senses; part of it is made up of ideas, thoughts, and feelings gathered from our fellow-men and from books.

"Now just as the acquisition of our mental content is marked by having two aspects, or sides, so when we give out that which we have gained, we unavoidably display this two-sidedness of our mental life. For we work up the raw materials of Experience into one of two forms.

(1) We take away from all objects and ideas every vestige of individuality, by which they appealed to us in an individual way; and we leave only those characteristics that are common to the whole class of objects. Thus we arrive at general conceptions, or ideas; e. g., apple, ball, truth, etc. In the general conception, the apple has neither any particular taste, smell, size or touch quality. The term represents a mere idea; so too, with all the others. This is the method of Science, which takes away from all things their individual peculiarities, and seeks for the general laws that are true of all objects apart from the individualities of each. This method of thought appears in composition as

Exposition and Argumentation, and these qualities that stand out most plainly and which are most requisite in this sort of writing are the Intellectual Qualities of Composition.

(2) On the other hand, we may follow the other method in working over the raw material of our mind. Instead of eliminating all the individuality of things and classifying them under some general notion, we may emphasize the peculiarities of things and thus bring out their individuality. Instead of ignoring the features which made the object stand out as a separate, distinct object, we may dwell on these, and, when we write or speak of it, so reproduce the object that it is presented just as it appeared to us; and a perfect image of the thing may be impressed on the mind of another person, so that it may appeal to his attention and interest exactly as it did to us. He may thus be placed at our point of view, from which he may realize the thing from the same standpoint and with the same interest as we experienced when we originally perceived it. This method of thought, since it deals with the things themselves and not with general notions about them, is called imagination. It is the method of Poetry, and in fact of all Art. We have seen that Science may deal with general truths, such as 'Truth,' 'Gravitation,' 'Physics,' etc. Art can not deal with such things; it must deal with things to which concreteness and individuality can be attached. Hence, poetry deals with men and women, with acts, with natural objects, etc. This method of thought appears in composition as Narration and Description. The qualities that stand out most clearly in such writing are called the Imaginative Qualities of Composition.

"It must be understood that any piece of good composition will show both Intellectual and Imaginative Qualities. In some kinds of Composition the Imaginative Qualities will prevail; in other kinds the Intellectual Qualities will stand out more prominently.

"Thus the needful things of good composition may be arranged under two classes of the qualities of composition.

(1) The intellectual qualities must appear, or our composition will not be understood by our readers. If we neglect these qualities, we shall not be clear and definite. (2) The imaginative qualities must appear or we shall fail to do what is most necessary—to attract and hold the attention of our readers. We must aim to invest the subject with the needful interest."⁴

Words are fundamental to our very existence. They might truthfully be classified with food, raiment and shelter as a basic necessity for the preservation of human life, for without words man would be as one of the lower animals. One chief quality of all words which makes them so valuable is their power of suggestion. Suggestion has been touched upon in a previous chapter. There we saw that it was the power of originating or recalling ideas or relations. Each word, if we know its meaning, suggests that meaning particularly if used singly and alone. The most suggestive words are the specific imaginative ones, for they present to the mind a definite picture or image with which to work. The main value of suggestion in words grows out of a blending of several into a fused suggestion of the whole,

⁴ University of Wisconsin—
Course 7 Advanced Composition.

wherein the individual suggestions of each word are submerged. This is not as complicated as might seem. Every sentence is a suggestion, more or less, of this type.

The use of suggestive words is valuable to the lawyer especially in the appeal to the jury when it is desired to create a certain definite impression without direct mention. Human nature is so constituted that we give greater weight to the conclusions which we ourselves reach than to the conclusions of others.⁵ Thus, by the use of suggestion, a lawyer may, in addressing a jury for instance, really state the conclusions which he desires, without the jury becoming aware of the fact. He can lead the jury to follow his suggestion, believing that they themselves have figured it out. Let me quote a noted illustration which comes to my mind, namely, the speech of Mark Antony to the hostile Roman audience. Note the various suggestions, and the way in which sentiment is changed regarding the murder of Caesar.

“Friends, Romans, Countrymen, lend me your ears;
I come to bury Caesar, not to praise him,
The evil that men do lives after them,
The good is oft interred with their bones;
So let it be with Caesar. The noble Brutus
Hath told you Caesar was ambitious;
If it were so, it was a grievous fault,
And grievously hath Caesar answer’d it.
Here, under leave of Brutus and the rest,—

⁵ John C. Reed, *Conduct of Law Suits*, 2nd Ed., p. 379.

For Brutus is an honourable man,
So are they all, all honourable men,—
Come I to speak in Caesar's funeral.
He was my friend, faithful and just to me;
But Brutus says he was ambitious,
And Brutus is an honourable man.
He hath brought many captives home to Rome,
Whose ransoms did the general coffers fill;
Did this in Caesar seem ambitious?
When the poor have cried, Caesar hath wept;
Ambition should be made of sterner stuff.
Yet Brutus says he was ambitious,
And Brutus is an honourable man.
You all did see that on the Lupercal
I thrice presented him a kingly crown,
Which he did thrice refuse. Was this ambition?
Yet Brutus says, he was ambitious,
And, sure, he is an honourable man.
I speak not to disprove what Brutus spoke,
But here I am to speak what I do know,
You all did love him once, not without cause;
What cause withholds you then to mourn for him?
O judgment, thou art fled to brutish beasts,
And men have lost their reason!—Bear with me;
My heart is in the coffin there with Caesar,
And I must pause till it come back to me.”

* * *

“But yesterday the word of Caesar might
Have stood against the world; now lies he there,
And none so poor to do him reverence.

O Masters! If I were disposed to stir
Your hearts and minds to mutiny and rage,
I should do Brutus wrong and Cassius wrong,
Who, you all know, are honourable men.
I will not do them wrong; I rather choose
To wrong the dead, to wrong myself and you,
Than I will wrong such honourable men.
But here's a parchment, with the seal of Caesar;
I found it in his closet; 'tis his will.
Let but the commons hear this testament,—
Which, pardon me, I do not mean to read,—
And they would go and kiss dead Caesar's wounds,
And dip their napkins in his sacred blood,
Yea, beg a hair of him for memory,
And, dying, mention it within their wills,
Bequeathing it as a rich legacy
Unto their issue."

* * *

"Have patience, gentle friends, I must not read it,
It is not meet you know how Caesar lov'd you.
You are not wood, you are not stones, but men;
And, being men, hearing the will of Caesar,
It will inflame you, it will make you mad.
'Tis good you know not that you are his heirs
For if you should, O, what would come of it?"

* * *

"Will you be patient? Will you stay awhile?
I have o'ershot myself, to tell you of it.
I fear I wrong the honourable men
Whose daggers have stabb'd Caesar, I do fear it."

"You will compel me, then, to read the will?
Then make a ring about the corpse of Caesar,
And let me show you him that made the will.
Shall I descend? And will you give me leave?"

* * *

"Good friends, sweet friends, let me not stir you up
To such a sudden flood of mutiny.
They that have done this deed are honourable.
What private griefs they have, alas! I know not,
That made them do it; they are wise and honourable,
And will, no doubt, with reason answer you.
I come not, friends, to steal away your hearts.
I am no orator, as Brutus is,
But, as you know me all, a plain blunt man,
That love my friend; and that they know full well
That gave me public leave to speak of him.
For I have neither wit, nor words, nor worth,
Action, nor utterance, nor the power of speech,
To stir men's blood; I only speak right on,
I tell you that which you yourselves do know,
Show you sweet Caesar's wounds, poor, poor dumb
 mouths,
And bid them speak for me. But were I Brutus,
And Brutus Antony, there were an Antony
Would ruffle up your spirits, and put a tongue
In every wound of Caesar that should move
The stones of Rome to rise and mutiny."

If you have carefully followed the psychology of Antony
you will have observed the many suggestions to the mul-

titude. Note the fact of the hostility of the audience to begin with, and how carefully concealed the suggestions. No direct suggestions could then be employed; it would have been fatal. Frequently the suggestion is directly contrary to the spoken word. As the audience becomes friendly the suggestions become less concealed.

Emmanuel Kant possibly served his purpose by writing his "Critique of Pure Reason" in such language as to be incomprehensible to all except a few patient scholars who were willing to use the dictionary constantly, yet he has been severely criticized for the manner in which he wrote it. Lawyers, however, frequently fall into the same, yet less excusable trouble. I say less excusable trouble advisedly because of the fact that the lawyer's audience is frequently composed of persons who are not trained to understand exact legal phraseology. This creates, as a general rule, a barrier to success.

Let us consider a moment the psychological effect of long and short, known and unknown, and familiar and foreign words. In a court of law the effect depends almost entirely upon the ability of the audience. Sometimes the nature of the case, as one in which flights of oratory are appropriate, may vary the effect. Sometimes the character of the speaker may have some bearing on the effect, but usually it is almost entirely the audience. The average jury is not composed of highly intellectual men. They can not understand words which are without their scope of life. They can not reason in legal terms or strange words. They must translate into their own words all thoughts expressed before they reason. If the lawyer makes them

draw their own inferences from misunderstood words, he makes possible many logical errors with which to begin.⁶ The reasoning of the jury is so inaccurate at best that an advocate can afford to take no more chances than are absolutely necessary. Thus it behooves him to put his facts into such words that the jury can reason with his very words. I have observed members of the bar coin simple, yet catching expressions for this very purpose, and with great effect. Latin expressions have almost entirely disappeared from the parlance of the court, as the law aiming at more exact justice now looks less to form and more to facts than formerly. A good general rule to draw from these premises would be stated as follows: If your appeal is to reason, use words with which your hearers may directly reason, without requiring them to draw fallacious inferences as to the probable meanings of the words.

We shall now consider the psychological effect of various combinations of words. The first type of combinations considered will be that of the figures of speech. Webster says a figure of speech is a mode of expressing abstract or immaterial ideas by words which suggest pictures or images from the physical world. They lend to composition the qualities of imagination. Law is in a large measure abstract. Can you picture in your minds a concrete image of jurisprudence or slander or deceit? It is impossible. They are abstract ideas, incapable of imagination by the mind.

There are about two dozen figures of speech according to

⁶ Herbert Austin Aikens, *Principles of Logic*, 2nd Ed., Rev., pp. 22, 23.

most classifications. Of these those which are used most frequently and which are the most important are: namely, simile, metaphor, personification, synecdoche and metonymy. When properly employed they are instruments of real power to the lawyer.⁷

A simile is a comparison of two things by showing some similarity. It is a statement of likeness. By its use, the lawyer may create a clear and lucid conception of some obscure object or action,⁸ or he may translate some abstract situation into a vivid and easily comprehensible picture for the imagination. Webster gives us a forceful simile when he says,

“The secret which the murderer possesses soon comes to possess him, and, like the evil spirits of which we read, it overcomes him, and leads him whithersoever it will. He feels it beating at his heart, rising to his throat, and demanding disclosure. He thinks the whole world sees it in his face, reads it in his eyes, and almost hears its workings in the very silence of his thoughts. It has become his master. It betrays his discretion, it breaks down his courage, it conquers his prudence. When suspicions from without begin to embarrass him, and the net of circumstances to entangle him, the fatal secret struggles with still greater violence to break forth.”

Similes are very prevalent in the language used by a lawyer. When a lawyer cites a case which is like the one in question, he is using a simile to enlighten the judge. When

⁷ Byron K. Elliott & William F. Elliott, *Work of the Advocate*, 2nd Ed., p. 284.

⁸ Delbert Moyer Staley, *Psychology of the Spoken Word*, p. 150.

a lawyer, in arguing to the jury, pauses from the main theme of his argument to clarify some situation in question by reciting an analogous situation, he is resorting to the use of a simile.

A metaphor borders very closely to a simile both in composition and effect. A simile states that a certain thing is like something else, while a metaphor states that a certain thing is something else. Thus, to say that a murderer acted like a fiend, would be a simile, while to say that a murderer was a fiend, would be a metaphor. The metaphor enables one to clothe the most abstract ideas with life, form, color and motion.⁹ With great effect, it enables the lawyer to embellish and enliven his most abstract ideas.

By the use of the figure of speech called personification, we bestow upon an inanimate object some quality of life by attributing to it some quality, action, thought, or feeling of a human being.¹⁰ Thus when we say that the hand of the law should strike hard at a criminal, we are using the figure of speech, personification. This figure of speech may be very appropriately used by the lawyer to put action and interest in dry and inanimate subjects.

According to Webster a synecdoche is a figure of speech by which a part of a thing is put for the whole (as, fifty sail for fifty ships), or the whole for a part (as, the smiling year for spring), the species of the genus (as, cutthroat for assassin), the genus for the species (as, a creature for a man), the name of the material for the thing made, etc.

⁹ Delbert Moyer Staley, *Psychology of the Spoken Word*, p. 151.

¹⁰ Delbert Moyer Staley, *Psychology of the Spoken Word*, p. 155.

A knowledge of the character of a synecdoche, particularly as to its treacherousness, is very valuable to a lawyer. Watch carefully any arguments employing a synecdoche. It is very easy to fall into logical fallacies by the ambiguous use of words, or by using a collective or distributive word one for the other.¹¹ Considerable care is necessary to avoid and untangle fallacies when synecdoches are the basis thereof.

Metonymy is the putting of one word in the place of another which suggests it. Like a synecdoche it may very easily cause one to fall into a logical fallacy when it is employed in argument.

A few words at this time as to the psychological effect of quotations might not be amiss. The quotations found in law suits are usually those derived from prior cases, and are quoted in the belief that they are pertinent to the matter at hand. They are, as a general rule, used to lend weight to some legal point rather than to a matter of fact, and hence are addressed not to the jury but to the court. The value of a quotation in such an instance depends upon the reputation of the person whose words are quoted, upon their degree of relevancy to the point which you are trying to re-enforce, and upon the quality of the composition. Obiter dictum is thus not a particularly forceful quotation. Even good quotations may be used in too large quantities. The marginal value of each becomes less as each additional one is used. It is better, then, not to overdo the use, but to state only the best, creating the impression that many more

¹¹ In any good book on logic use of words fully discussed. It you will find the proper logical is too extensive to develop here.

are at hand. Often the knowledge that a quotation is at hand creates as good an impression as if the quotation were really given.

Several other quotations are sometimes used in the courts. The only one worth mentioning here is the quotation in the argument to the jury at the close of the trial of the statements made by witnesses during the course of the trial. The very words of a witness offer a last impression when the jury again hears them re-enforced by the argument of counsel. When there is contradiction in the testimony of the same or several witnesses, the point can frequently be shown more clearly by giving the exact replies which conflict. No man will as readily believe what he is told as what he can see for himself. Quotations of the words of witnesses also serve to aid the memory of jurors by bringing into bold relief the points which you wish to impress, at the same time submerging the other points and making them less vivid.

Something must be said regarding the effect produced by addresses of different lengths. In a law suit, this appertains especially to the opening of the case and to the various arguments which may be made. Here again we must refer to the economic law of marginal utility. The more words that are added the less valuable is each individual word, and the more words there are to influence the mind of a hearer, the less influence will each single word have. Up to a certain point, however, the cumulative influencing force of many words is much greater than the force of a lesser number, but beyond that point words lose their force by the inability of the hearer's mental equipment. The de-

termination of the point of maximum influence is the important thing, but it is difficult to fixate on account of the many variable factors. Of these factors, the two most important ones in a law suit are the subject of the discourse and the personality of the speaker. Never is it safe for a speaker, unless he is purposely trying to muddle things, to use more words than are absolutely necessary to make clear the exact and definite meaning. If the idea is simple it requires less words than if it is complex. Some speakers hold to the erroneous impression that if they do not consume the full time allowed to them in an argument they will make a bad impression. They hang themselves with their own ropes.

The personality of a speaker will sometimes vitiate all rules. There are, however, few such speakers. They hold the interest and attention and make themselves clear regardless of the length of time they talk. No man can, however, take the chance of classifying himself as one of these. It will always pay to play safe.

Style in language will be the next topic for consideration. The only reason for a discussion of style is that different styles produce different effects. Style in writing is the manner of writing, just as the style of dress is the manner of dress. Styles in the choice of words are much more stable than are styles in most other things. No less than a decade of time is necessary for material change to occur. The first characteristic of style is correctness in the use of words. Errors in the correctness of style produce two harmful psychological effects to the lawyer. In the first place they are unpleasant to any ear which hears them. In the second

place they cause a shifting of attention from the ideas to words, or we might say a shifting from the thoughts being expressed to the mechanism of expression. Good style on the other hand tends to hold the attention if for no other reason than that of its aesthetic appeal.

Style, however, is composed of more than correctness. Variety, tone and harmony are additional traits. We are constantly told to avoid monotony in wording and in sentence form. Monotony makes impossible the holding of attention for, as we saw in the chapter describing it, attention must constantly have change. Even variety must not, however, be carried to an extreme. Tone is an important quality in the courtroom. Antagonism may be incurred by a haughty tone. Likewise there are tones of hate, anger, friendship, love and the like, all of which produce corresponding results to the hearers. Be sure your tone does not defeat your purpose. If yours is a plea of mercy do not use a tone of hate.

Harmony is out of place, as a general rule, in the courtroom. There should be no jarring clashes of words, but neither should the hearers be lulled to sleep. Goodness knows, enough jurors have difficulty in staying awake now. There should be no rhyme in courtroom prose. Leave that to poetry.

The use of words in sentences comes under one or more of the four classifications, which are exposition, narration, description and argumentation. All are found in use during the trial. The opening of the case is mainly expository for it merely explains to the jury what you expect to prove. The evidence is largely narration and description, for it

tells the story of some actual happening, and frequently describes persons and scenes. Argumentation is left principally to the closing argument. There it is plainly labeled, yet throughout the trial many things happen which are arguments to the jury. In fact it may be safely said that in most cases, the jury has been convinced one way or another by the close of the evidence. The persuasive force by which they have been convinced is a most subtle one. Its effect is doubly forceful because its means are concealed. He who does not plan his case in such a manner as to make the evidence an argument has lost a valuable ally. To be convincing the evidence must not be choppy but must be logical in its development. Too many lawyers make the mistake in this connection of presenting to the jury every fact that the witness knows, regardless of whether the facts will make a break in the story, or whether they are amply provable by others.

The third and last division of our discussion of the psychology of words has to do with the spoken word. We shall treat the effect of words as dependent upon the manner in which they are verbally expressed. We lay considerable stress on the manner of speaking. As an instance of this I remember one gentleman whose manner of speaking was so efficient that he could swear in polite society without in any way making himself seem vulgar or less a gentleman. Many other illustrations are available. Anyone may draw them from personal experiences. One person tells us of our faults, and we appreciate it; another tells us of our faults, and we resent it. Upon our manner of speaking depends the force, the clearness, the emphasis and the con-

viction of what we say. The ideas of a weak speaker may be just as good, may even be more accurate and better than those of a strong speaker, yet they do not carry as much weight when verbally expressed. This division in faculties accounts for the separation of the practice of the law into the fields of the trial lawyer and the office lawyer. If a lawyer combines the qualifications of an office lawyer with those of a trial lawyer he is doubly efficient, but usually it is not so. Most lawyers are weak in one of the two respects. Look at the partnerships that exist where one partner conducts the cases in the court, while the other seldom leaves the office.

Whether a man articulates clearly or not may determine whether his words are understood or not, and whether the attention of his hearers is held or not. Poor pronunciation is like a miserably and unintelligibly written letter. Both require labor to decipher. With a letter there is plenty of time available, but with a speaker each thought must be comprehended as it is presented or it is irrevocably lost. It is thus impossible to obtain more than an idea here and there as to what is said. It was several years ago, shortly after the close of the World War on Armistice Day that I heard a Frenchman deliver an address. He probably could have gone home to France and said that the Americans did not understand their own language, for all that could be understood was an idea now and then as to what he was saying. It is the same situation with poor articulation. By the time the mind has reasoned out a few words, so many ideas have been lost that there is no connection. Poorly articulated words are not only a hindrance to the process of thought and reason, but they are a bore, and as a bore they

tend to divert the attention to anything else which is more pleasing in its sensations. Attention, as we have seen at numerous times, is at best a wary faculty easily shying and hard to focus long upon anything, so that great skill is required to create enough interest in the matter at hand to preserve it. The mumbled sentences of a schoolboy at a Christmas entertainment may hold the attention of the few prejudiced parental visitors, but in a court of law there are no days of grace for a lawyer who mumbles his words into an uninteresting and incomprehensible fusion.

Inflection is the second quality of the spoken word which we will investigate. Inflection is the change of pitch from one definite pitch to another definite pitch with no apparent interval between.

There are four kinds of inflection, namely, long, straight, abrupt and circumflex.¹² Long inflection is most appropriate in commanding utterances where the feeling is intense.

"Let no man dare, when I am dead, to charge me with dishonor; let no man attaint my memory, by believing that I could have engaged in any cause but that of my country's liberty and independence; or that I could have become the pliant minion of power, in the oppression and misery of my country. * * * Let no man write my epitaph; for, as no man who knows my motives dares now vindicate them, let no prejudice or ignorance asperse them. Let them and me rest in obscurity and peace, and my tomb remain unin-

¹² Delbert Moyer Staley, *Psychology of the Spoken Word*, pp. 13-23.

scribed, and my memory in oblivion until other times and other men can do justice to my character.”¹³

Straight inflection is inflection with little range of tone travel. Its effect is more dignified and consequently is found in business and judicial speeches where the object is mainly reason. The charge of the jury by the judge is usually given in inflection of this type.

Abrupt inflection is used in shallow discourse where there are no weighty matters at hand and is of little importance to a lawyer. Likewise, circumflex inflection is of little similar value. It carries a shifting, uncertain impression, frequently of prevarication.

Pausation is a topic we may well discuss next. It is but the suspension of words with a continuation of thought. It affords the mind of the hearer an opportunity to consider and weigh what was said, and as it is a change in the order of things it creates attention. It conveys a sense of importance and of deep thought as well. The imagination seizes upon the opportunity to visualize the scene. In written words we recognize the importance of pauses to convey the proper impression, and we have the devices of punctuation marks to set them off. In spoken words careless speakers often slight them through the failure to realize the valuable part they play in aiding the understanding and in lending weight and dignity to the discourse.

Take this excerpt from the speech of Robert Ingersoll at his brother's grave as an illustration.

¹³ From the speech of Robert Emmet on the scaffold in Dublin in 1803.

"We cry aloud, and the only answer is the echo of a wailing cry. From the voiceless lips of the unreplying dead there comes no word; but in the night of death hope sees a star and listening love can hear the rustle of a wing. He who sleeps here, when dying, mistaking the approach of death for the return of health, whispered with his latest breath, 'I am better now.' Let us believe, in spite of doubts and dogmas and tears and fears, that these dear words are true of all countless dead. And now, to you who have been chosen among the many men he loved to do the last sad office for the dead, we give this sacred trust. Speech can not contain our love. There was—there is—no gentler, stronger, manlier man."

No speaking is really effective unless the voice is in tune with the ideas, and the ideas in tune with the words. Unless this is so, there is an air of hypocrisy which, when apparent to the hearer, removes largely the force of conviction. No mind can be convinced if it knows that the mind that is trying to convince it does not believe that way. A great and sometimes very just criticism has been hurled against the bar on this very score. It is claimed they will, in their manner and speech, assume an hypocritical attitude to defeat the ends of justice, when they know that their stand is absolutely false. But we can not change this unless we change human nature first, and so difficult of change is the latter as to make the task impossible. The most we can now do is to observe and to use properly this matter of tune or colorization as it is frequently denoted. Colorization may be properly used with anything that is worth expressing in words. Indeed it is difficult to follow a

speaker and to thoroughly appreciate the speech unless colorization is present.

The strict psychologists do not refer to tonal qualities as being possessed of color. They reserve color for visual sensations. And yet words may express color. When we say—

“ ’Twas a dark and stormy night
The hills and water o’er
When a band of pilgrims moored their bark
On the wild New England shore—”

ought there not to be some darkness and some storm in the voice? It makes it a great deal more effective if there is. Animate matters are more interesting than inanimate ones, and colorization makes words into living beings, for it transfers to the word a part of the being who expressed them. Did not Webster lose a part of himself when, in the memorable address at the Bunker Hill Monument, he proclaimed, “Let it rise! Let it rise till it meet the sun in its coming. Let the first rays of the morning gild it. Let the parting day linger and play on its summit.” Surely those very words which have lived so long have done so only through that part of Webster colorization with which they have been endowed.

The rapidity with which words are expressed may have an important influence. Time and again I have heard older members of the bar caution against reading and speaking rapidly. Law is an abstract science and it is much more difficult for the mind to follow abstract matters than it is concrete ideas. All of us are prone to overlook the fact that what may seem perfectly clear and simple to us (after we have studied the matter diligently) may not be so simple to

others that we may expect them to comprehend thoroughly with a hasty explanation. I have heard lawyers read depositions to a jury so hurriedly that they surely could have understood little of what was said and remembered still less. The use of spoken words as we know them today certainly is not an instinct but acquired only through laborious effort, and in few individuals is it found so perfected as to make possible the comprehension of a rapid flow of any length. But we must not go to the opposite extreme by dragging the words. That is even worse than speaking too rapidly for it is more difficult to remember words spoken very slowly than it is words spoken rapidly. This point has been observed in the Binet-Simon intelligence test.¹⁴ A group of numbers is given, each a second apart, and the subject must repeat them at the end. It has been found that it is easier to remember the numbers if they are said a second apart than if they are said more slowly. We may draw the following inferences from experience in speed of words. If either the words are spoken so slowly as to allow the memory to lapse and to break the connection of the thought, or if the words are spoken so rapidly as to make incomprehensible the entire chain of thought, then the attention also will lag. Without attention there can be no proper conduct of law suits for without attention reason is impossible. The speed with which words are spoken may seem a trite subject not worth discussing, but so universally is it misused that it is not amiss to say these few words here regarding it.

¹⁴ The Stanford Revision of the Binet-Simon Intelligence Test as stated by L. M. Terman in Measurement of Intelligence.

The foregoing paragraphs of this chapter contain but a bare few of the phases of the psychological influence of words, spoken and written. There are many others. But those that are given, are given in the hope that they will cause attention to be directed to the fact that words, through the influence created by their usage, may either make or mar any composition.

APPENDIX A

THE BERKELEY LIE DETECTOR AND OTHER DECEPTION TESTS

By Dr. John A. Larsen.¹

Since deception plays such an important role on the witness stand and in criminal investigation, it is imperative that the criminologist should become familiar with some of the manifestations of it and the method employed in the study of the deception process.

The earliest account of a case of deception is in the Bible where King Solomon is called upon to decide which of two women who claim the same child is lying. He settled the dilemma by ordering the child to be cut into two pieces whereupon the mother renounced her claim and the liar maintained silence. There has long been a deception test in the Orient which is based upon psycho-physiological principle. The accused is requested to chew rice and then spit it out and if the rice is dry the suspect is deemed guilty as the fear of the guilty suspect was supposed to inhibit the secretion of saliva. In India it has been stated that it is possible to detect deception by the movement of

¹ Address of Dr. Larsen delivered at meeting of Section of Criminal Law of American Bar Association at San Francisco August 8, 1922. From Reports of American Bar Association, Vol. XLVII, 1922, pp. 619-628. Dr.

Larsen is also the author of an interesting monograph entitled, *The Cardio-Pneumo-Psychogram in Deception*, which is published by the Department of Public Welfare of the State of Illinois.

the big toe of the witness. Whenever the accused lies there is a movement of the big toe. In a much cruder fashion the English attempted to detect guilt by methods known collectively as the ordeal. Thus, if the accused were thrown into a river and sank he was innocent, but if he lived he was deemed guilty. This method has been supplanted by the more modern third degree. Although this procedure is supposedly extinct, now and then one hears of its practice. In general, whatever method breaks down the resistance of the suspect is employed. Thus, if a man is addicted to the excessive use of tobacco he is not allowed any or he is deprived of sleep for days while relays of detectives work him. In one case related to the writer, a detective in a large city held a gun against the head of the suspect and told him to come through. Aside from humanitarian considerations one important objection to this method is that cases have been known where innocent men have broken down under the strain and admitted complicity in a crime of which they were innocent.

With the evolution of science and the correlation of observations from the fields of physiology and psychology, a truer conception of human behavior is being constructed. A true conception of the processes underlying deception is still to be had. Without attempting to analyze the deception syndrome it is sufficient at this point to emphasize that psychologists attribute to the emotion fear a very important role. William James and others agree in defining an emotion as being nothing more than the bodily changes which follow directly the perception of the exciting fact, and the feeling of the same changes as they oc-

cur is the emotion. Thus the emotion fear may be said to have specific symptoms.

Modern physiologists have gone further and have shown the defensive mechanisms involved in fear and the role which the internal secretions play in response to the stimuli. The adrenalin explanation of Cannon explains what happens between the receiving of the stimulus and end result.

Of the above manifestations of fear the most common are the turning of the eyes away from those of the examiner, squinting of the eyes, blushing, throat pulsation, cold sweat, spasmodic twitching of the head and limbs—such as clutching of the collar, stealthy cat-like tread, peculiar monotone inflections of the voice, plaintive and soft; verbosity—Shakespeare's "Methinks he doth protest too much," dryness of the throat.

Liars have been divided into several classes. If divided according to their ability to conceal or inhibit the indications of deception there is first the type who is unsuccessful. He is easily recognized upon the witness stand and by detectives by the symptoms mentioned above. Then there is that individual who is able to lie and not show any indications by external signs.

The same type of liar who is detected by the above symptoms may, under emotional stress, as on the death-bed, angry at betrayal, or terrified at arrest, suddenly declare "Now I am going to tell the truth." This statement serves to introduce the confession. This resolution to be truthful is usually of short duration and if the emotion passes the confession is regretted. It is difficult to lie while under the influence of narcotics and during intoxication.

Advantage of this has been taken by a physician who is endeavoring to use a drug, scopolamin, and then question the subject while under its influence.

Habit plays an important role in the detection of certain individuals. Helmholtz once stated that "every state of consciousness has its physical correlate." Thus for every mental event there must be a corresponding physical one in some form. Of course this physical expression will vary according to the emotional state, type of individual, and will be subject to many limitations. Through the intervention of many variables a correct interpretation of their symptoms is often impossible, and at best haphazard. As illustrative of the influence of habit, some people yawn when under tension, some move their limbs. The effect of habit seen in gestures is of value when an individual illustrates his lie with gestures which are diametrically opposed. Thus a person expresses love for someone, but by the clenching of his fist gives the words the lie.

Most people gesticulate. These deep-rooted tendencies are shown in deception where the man, who although consciously lying is governed by the repressed truth and gesticulates accordingly.

Spencer with many other workers, emphasizes the importance of voice in the detection of deception. The varying inflection or the timbre of the voice often gives the most clever liar away. Through stimulation of the nerves there is a resultant movement of the facial muscles, and those concerned with swallowing. The monotone, slightly quavering voice may be very significant. Gross concludes that effective simulation of the voice is hardly possible. In

using this method of diagnosis much caution is necessary, and it should not be used alone but with other factors.

Paling and blushing have no diagnostic indication when used alone. Even when considered with other factors much caution is necessary, and these symptoms may be entirely lacking in a certain type of liar.

Following the detection of deception by the physical methods, if present, psychologists attack the problem by association methods, both qualitatively and quantitatively. As to the former there is a marked lack of agreement, but on the quantitative side there is more unity. Most psychologists agree that deceptive associations tend to increase the reaction time. Of living psychologists, Langfeld of Harvard is a firm adherent of the association method for the detection of guilt. Marston, a Boston attorney and a pupil of Munsterberg, in working upon a different method for the studying of the deception process compared the association methods and found them unsatisfactory as compared with his method. In our work, later to be described, we have found many cases of deception where the individual has subsequently confessed and this deception was not indicated by any delayed reaction time.

Students have studied the association of ideas since the time of Aristotle. All of our ideas are linked together with other ideas. One word or association at once calls to mind another one. In experimental psychology the workers usually use a standard list of words and these are alternated with words which concern the crime being investigated. Then from a comparison of the time which elapses between the giving of the word and the answer, guilt is

determined. Thus, if the suspect hesitates longer on one word than another, then there is a guilty association about this word according to this school. The character of the words also gives an idea as to the connection of the suspect with the alleged crime.

Munsterberg was a strong advocate of this method and went so far with it as to use it in court cases and in the Orchard case, he declared that the accused was innocent.

In conclusion as to the efficacy of the delayed reaction time and nature of the response, at present it does not seem effective in the detection of deception, if used alone, but sometimes if used corroboratively may be of value.

The first real step towards the working out of a deception test making use of physiological changes associated with emotional disturbances was the masterly work of Benussi. He detected deception by studying breathing during the process. He found inspiration to expiration symptomatic of "internal excitement" caused by lying and this was found to be stronger in the case of the clever liars than in those easily detected. His work has since been confirmed by H. E. Burt who found with Benussi that the breathing is diagnostic of deception even though the subject tries voluntarily to control the breathing. Proceeding further Boris Sidis utilized respiration as a means for diagnosis in psychiatric investigations. In one case he found that the tracings of the respirations differed in a woman with a dual personality and he was able to differentiate between the two elements.

For years physiologists have noticed that the respiration and heart action are often markedly affected by the emo-

tions. Aside from studying the effects of the emotions upon the respiration some workers have studied the vasomotor changes by means of the pletysmograph. The changes in volume and the fluctuations obtained by this method are too variable to use in a practical test for deception. Physicians have noticed that in securing accurate determinations of blood pressure and cardiograms the emotions play an important role. After the work of Benussi on the respiration the next step forward was made by Marston, a former pupil of Munsterberg. He made use of the fact that there may be an increase of blood pressure during the process of deception. Accordingly he conducted a series of tests upon the changes in the blood pressure during deception. Unless there is an increase of blood pressure of over 10 mm. he concluded that there was no deception. These determinations were taken not continually but intermittently at definite intervals and from the figures a curve was plotted and from the nature of this curve a decision was reached. He conducted several series of tests in all of which he obtained a high degree of accuracy in the detection of deception. In some cases he worked with students who lied at will and if they did the deception was detected. Of course the process involved here differed to some extent from those present in the person accused of a crime. He also worked with police cases and was successful in his work. It is well to emphasize again that he uses blood pressure changes as indicative of deception only when there is an appreciable increase over an arbitrary boundary line. He obtains these readings in the same manner in which the physician secures his in the routine work.

In the investigation which we have carried on during the past two years covering hundreds of individuals we have seen many cases of deception in which there was nothing which according to Marston would indicate deception. Thus in individuals who were detected by the present test and later confessed, Marston would have found no significant changes. Marston's methods as well as that of others were used as checks in the present work.

Therefore it would be well for Marston's adherents to exercise considerable caution if they continue to base the detection of deception by blood pressure.

Over a year ago we started to use a deception test based upon the correlation between physiological and emotional activities. The essential feature of the test consists in securing a graphic record of the respiratory and cardiac changes during the process of deception. In this cure all of the changes as mentioned by Benussi can be recorded as well as a record of the heart's pulsations and blood pressure tracing. In addition a check is made on one arm to study deception so as to either confirm or check Marston's results. Synchronously with the above record a timing curve is obtained. In addition the association time is recorded by suitable signaling devices. The procedure is as follows:

1. A record, control, is secured without any questions or words.
2. This is followed by a short prefatory statement in which the nature of the test is explained and the necessary instructions are given. Thus the suspect is told to answer

only "yes" or "no" to any questions and that if he lies the fact will be detected.

3. The preamble is followed by a series of indifferent questions which are to be answered "yes" or "no."

4. A series of questions upon the crime.

5. A set of association words. Here a list of words are alternated with a list of our own upon the investigation.

6. A Woodworth questionnaire of 116 questions in some cases. This is used on all sex perverts.

As checks upon former methods the reaction time is recorded and the blood pressure changes are recorded on one arm as Marston did. All possible variables are eliminated. The subject is placed so that he can not see the apparatus. In addition to securing checks on a single suspect, it is often possible to secure fifty or more. Thus in case a crime has been committed in a house where there are sixty individuals and there is no evidence pointing to anyone, all of the persons are run and checked on each other.

It is the idea of the present investigation to ascertain, if possible, how much information can be gleaned from the present deception test. The following facts seem to stand out from the hundreds of individuals examined in actual police investigation.

1. The association words with the time reaction do not give as definite results as the cardio-respiratory changes.

2. Blood pressure determinations are not as reliable as a study of the graphic records. Many cases of confessed deception have been noted in which there was no rise which

Marston states constitutes deception. Other procedure based purely upon quantitative estimations are open to the same criticism. Thus the use of various electrical devices and galvanometers has many more variables to contend with and then at best the changes are much more difficult of interpretation.

3. In every case of deception as examined by the cardio-pneumo-psychograms and checked by confession there are marked changes in the records. These deviations are so definite that they can be differentiated from the rest of the record. The effect of the repression varies according to the temperament and physical character of the individual. Thus there may be an increase or decrease in frequency, a marked depression or excitation, or a more or less summative effect. In all cases of deception yet encountered, the curve differs from that of the controls or the person who does not repress. In many cases of innocent persons accused of a crime there may be an initial tension but this is generalized and easy to control. It appears, if at all, before the crime has been touched upon. It has been actually found that regardless of the nervous condition of the innocent, when accused the suspect can be easily eliminated. That the apprehension of an innocent man accused of a crime does not interfere with the test can be seen in cases such as the following: 48 girls are living in a house in which a series of larcenies have occurred. Working by the ordinary methods no tangible evidence had been secured. All of the girls volunteered as a body to submit to the test. Out of these a girl was chosen as responsible. She subsequently confessed to a series of thefts. In cases where

many individuals are concerned it frequently happens that two or three persons are selected in the first test. Later all but the guilty are eliminated as it was found that they had committed some other offense which was suggested by some question, but when this was cleared up they were easily eliminated. In practical use this test has been utilized not to gain a conviction but a knowledge as to the identity of the guilty party and from then on ordinary police procedure is followed. Thus the accused usually confessed and this confession is written and then serves as evidence. In all cases the suspect submits voluntarily. It has been found from actual experience that the recidivist and the clever crook is easier to detect than others. In several cases medical students and physicians have been detected although they tried every known method to prevent detection. In this test detection is possible if there is a real emotional element present. If a person lies just for the sake of deceiving, detection may not result and if it does the processes involved are different than those in cases where there is a real fear element involved. Of course the test is so conducted as to eliminate anger or resentment and this is not difficult.

4. The marked irregularities due to the effects of repression involved in the deception process disappear with the confession. If, however, a subject maintains a repression in successive tests, as a rule the effects continue although he may know the stimulus word or question and when it is coming. In all cases up to the present time when the subject was given the same questions after confession the record was clear. The same thing occurs when the subject confesses when first questioned.

5. Physiological or pathological factors do not appear to interfere with the test, provided that the subject is able to understand the questions and is not unfit mentally, as in some of the imbeciles and psychotic individuals. Thus, if a subject has an irregular heart this is ascertained in the control. If a subject is temporarily unstable because of worry or physiological strain such as fatigue, menstruation, etc., this in no way interferes with the effect of the emotional disturbances.

6. In this test a graphic record is obtained which represents in visible form the emotional wave which we may term the cardio-pneumo-psychogram. Here every pulsation is shown. Whether the change be of the nature of an inhibition or excitation that deviation is recorded. This graphic record obtained is specific and varies with each individual. Pictorially the individual is represented in two ways, first by his present physical condition as shown in his heart and respiratory rhythm, and second by his reaction under stress, during questioning which may involve him in some crime. Thus a phlegmatic individual or a person with a hypo-thyroid insufficiency does not have the same type of record or react in the same manner as the nervous, dynamic type or the individual with the hyper-thyroid condition. In these records, the persons resolve themselves into groups which at first glance seem to depend upon the temperaments or the dispositions of the individuals. The cause, however, seems to be deeper for the emotional reaction of the individual may depend entirely upon his physiological or pathological picture. Records may be grouped physiologically according to age, sex and other fac-

tors. In short, any factor, normal or abnormal, which affects the heart and respiratory activity to any extent will show up in the record. This effect may only be transitory. In some cases, as in certain girls during menstruation there may be changes from their response during stress from other times. The pathological factors such as arteriosclerosis, improper cardiac functioning due to disease, abnormal conditions induced by pregnancy, etc., may give the records a typical appearance. In addition to depending upon the above factors the appearance of the record may vary with the mental condition of the subject, which in turn depends upon underlying conditions. Persons who may be grouped physiologically may be separated by their emotional reactions to various stimuli.

7. Interesting records have been obtained with drug addicts. The transition from the very sick moaning, miserable individual to the very cheerful one may be shown graphically by comparing the record of the same individual before and after an injection of the drug.

8. The cardio-pneumo-psychogram is in the form of a permanent record which is easily preserved and could form the basis for court use after thousands of standards have been drawn up. However, to qualify as experts to pass upon these records with scientific accuracy the expert should be a person with a sound psycho-pathological knowledge and a student of abnormal behavior. The changes which could be pointed out to the jury, however, are so striking that they could be easily recognized.

By way of recapitulation we may add that there is no test in its present state which is suitable for the positive

identification of deception and suitable for court procedure. The test which the writer is now using attempts a check on the past methods as well as the application of a graphic record which depicts the emotional wave. The importance of this method is that the wave is photographed upon a record which is permanent and if ever the results are positive for court procedure the effects of deception can be studied by qualified experts in the court-room. However, if this stage is ever reached it will be only by careful standardization. This work with the graphic method is suggestive and the errors to be contended with will be those of interpretation. This can only be improved, if ever, by much cooperation and experimental work. Then we will be able to determine how far, if at all, a deception test can be relied upon.

APPENDIX B

MECHANICAL AIDS FOR MEMORY

“Rules for remembering, tricks of memorizing, were considered of great importance in the ancient world; oratory was highly esteemed; and no orator before the time of Augustus would have ventured to use notes. As the art declined, these rules were less and less regarded; we hear practically nothing of them between the first and the thirteenth centuries of the present era. From that date, however, interest in artificial memory-systems has never died out; they have been recommended for sermons, for lectures, for disputations, for public speeches, for the learning of foreign languages, for examinations, for practically every occasion in which memory is employed, as well as for the improvement of memory itself.

“The great principle of mnemonics is that you remember the novel and the disconnected by bringing it into arbitrary relation to the familiar and the connected.¹

“We print below the system, which is based upon an adaptation of the old letter-number principle, devised by us and now printed for the first time. If the reader is sufficiently interested to read the following paragraphs attentively he will probably find that the system itself can be

¹ E. B. Titchener, *A Beginner's Psychology*, p. 192.

'memorized' almost without effort, that is, a single careful consideration of the spelling and of the visual imagery of each word of the hundred will result in his being able to name most of them in any order. This is a point of value, since many mnemonic systems are so hard to retain that they are practically useless. In using the system in order to retain another prepared list (preferably simple, concrete nouns, as: ship, iron, money, etc.) the experimenter, if he has not already mastered the mnemonic device, may hold the same written on a card before his eyes while he listens to the very slow reading of the new list to be retained.

An Automatic Mnemonic System for Retention and Recall of Isolated Words.

1. Air	19. Alkali	37. Cog	55. Engine
2. Bar	20. Bun	38. Cough	56. Elf
3. Car	21. Boa	39. Cacti	57. Egg
4. Dagger	22. Bab	40. Dun	58. Elijah
5. Ear	23. Boracic	41. Dahlia	59. Ennui
6. Fur	24. Bed	42. Daub	60. Fan
7. Gar	25. Bee	43. Diabetic	61. Fibula
8. Hunger	26. Beef	44. Diamond	62. Fob
9. Indicator	27. Bog	45. Dice	63. Franc
10. Acorn	28. Bunch	46. Dwarf	64. Ford
11. Ambrosia	29. Biloxi	47. Dog	65. Face
12. Arab	30. Can	48. Dish	66. Fig-leaf
13. Alcoholic	31. Cocoa	49. Delphi	67. Fog
14. Almond	32. Cab	50. Emulsion	68. Fish
15. Ape	33. Comic	51. Encyclopedia	69. Fungi
16. Aloof	34. Card	52. Ebb	70. Gun
17. Aching	35. Cane	53. Epic	71. Guava
18. Arch	36. Calf	54. Ephod	72. Grab

73. Garlic	80. Hen	87. Hog	94. Island
74. Ground	81. Henna	88. Hash	95. Imbecile
75. Gate	82. Hub	89. Haiti	96. Icefish
76. Golf	83. Heretic	90. Iron	97. Icing
77. Gong	84. Hand	91. India	98. Itch
78. Growth	85. Home	92. Istib	99. Impi
79. Gobi	86. Hoof	93. Ipecac	100. Ann

(Notes: Biloxi (29) = Gulf town in U. S.; Istib (92) = Turkish village; Impi (99) = African savage.)

“How to master easily the Mnemonic System.—The two cardinal prerequisites for the use of the device are: (a) Understanding of the principles underlying the choice and spelling of the words in the above list of mnemonics, and (b) insistence upon forming at the outset a vivid, clear image (if possible visual) of the thing represented by each word of the mnemonic series.

“(a) How the permanent list of mnemonics is formed.—Notice the nine digits, respectively, 1, 2, 3, 4, 5, 6, 7, 8 and 9, correspond to the first nine letters of the alphabet, each of which letters in consecutive order marks the first letter in each of the first nine words, i. e., a = 1 (air); b = 2 (bar); c = 3 (car); d = 4 (dagger). The last letter (r) of the first nine words has no significance, except to help identify these words—air, bar, car, etc.,—as belonging to the first nine.

“Mnemonics 10, 20, 30, 40, 50, 60, 70, 80, 90 are thus formed: Let 0 (zero) = N. The first digit will be represented as before, a = 1, b = 2, c = 3, etc. Then we may always represent 10 by acorn, 20 by bun, 30 by can, 40 by dun, 50 by emulsion, 60 by fan, 70 by gun, 80 by hen, 90 by iron, 100 by Ann. Study each word of the series until the formation is understood, as related to the first and last letters of its spelling.

“(b) Imagery association with each word in the mnemonic list.—To the writer, the word air brings up a picture of the open heavens, atmosphere, blue sky. Bar to him recalls a great sand bar he once saw on the seashore. Car, a passenger coach. Dagger, a silver paper cutter on the desk. Ear, his own right ear. Fur, his wife’s hand muff. Gar, a large fish he pulled from the water, etc. Each original association is of some definite experience. Make no attempt to memorize by sheer repetition the words of the above list. It is unnecessary. In that the words of the series are recalled mechanically (according to digit and letter), the device is in a sense automatic.

“(c) List easily recalled.—If you understand the formation of each word according to the principle of correspondence of letters and digits explained in (a), and have aroused definite, vivid imagery for each word according to (b), then any word in the list may be easily recalled. Thus, what is the 25th word? It must begin with b and end with e; it is Bee.

“Using the Mnemonic System.—Have someone write out and remember 25 or 30 unrelated words, which he is afterwards to read to you. Concrete nouns are most suitable for the demonstration, as indicated at the outset. Make the steadfast rules: (a) Each word needs to be read aloud but one time, (b) do not permit a word to be read until you say ‘now’ or ‘next.’ That is, until you have had time in which to build a picture mentally with the correspondingly numbered mnemonic. Each word heard must arouse in the experimenter’s mind a definite image and this is to be related to the permanent images already formed for the

mnemonic series, e. g.: The reader first says dog. I think of my own dog, his color, size, appearance, and in order to link the ideas with mnemonic 1, I try to think vividly of this dog sniffing the air on a light cloudless day. (See (b) above). I thereupon dismiss the picture. I say 'now' or 'next', and the reader for his second word perhaps says tree. Mentally I portray a lone tree upon that sandbar (see b) representing mnemonic 2. The next word is brick. I think of a railroad car (see b) full of bricks, the car representing mnemonic 3. The more vivid the picture, even if it be ridiculous, the more promptly will each mental complex be recalled after the 25, 30, or more words have thus been heard and the ideas blended or associated. Few persons will thereupon have difficulty in recalling in any required order the whole list heard but once. To recall, e. g., the third word, one knows that the third mnemonic begins with c and ends with r; it is car. The image of car brings almost inevitably the persisting image of brick, ideas of which have been 'welded in consciousness' with ideas of car, and so for each of the other words. It is hardly a process of memorizing, but the results are quite startling to one who does not know that the experimenter has the mnemonic list either in his head or upon a card conveniently before his eyes if he does not care to learn the list by processes (a) and (b) above indicated.²

"Such devices have a special and temporary utility; we have all taken examinations and probably we have all had

² From Psychological Bulletin, An Automatic Mnemonic System, April, 1918, Volume XV, No. 4, by David S. Hill.

recourse to them on a larger or smaller scale. Many of us have paid the not infrequent penalty; we have remembered our mnemonic doggerel, but have forgotten the key to it, and so have forgotten the events or numbers that it was meant to recall; there is always that danger. No scheme of memory-aids that is universally applicable and universally reliable has been or can be discovered; there is no royal road to learning. In so far as a mnemonic rule follows the laws of associative tendency, as for many minds the local or topographical rule seems to do; or in so far as it chimes with some peculiarity of individual thinking; in so far, it will be of practical service in daily life; that is the most that can be said."³

³ E. B. Titchener, *A Beginner's Psychology*, pp. 193, 194.

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- emotions, susceptibility, 67.

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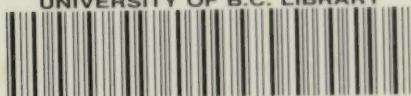
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